



Planning Services

Alberta

**PLANNING FOR AN EVALUATION
OF TEACHING PERFORMANCE**

VOLUME I

A Manual of Guidelines

Prepared by

I. Yuzdepski

and

L. Elliott

Planning Services Branch

Alberta Education

August, 1985

Except for the quotations which appear on pages 1, 5, and 10, the contents of this Manual are not intended to imply, either explicitly or otherwise, Alberta Education policy regarding evaluation of teaching performance.

ACKNOWLEDGEMENTS

The interest, cooperation and participation of several groups and individuals were required in the development of this publication.

Personnel from school systems who participated in piloting the materials in 1984-85 provided informative feedback. The staff of Library Services (Alberta Education) was unstinting in its efforts to track down resources. The advice and reactions provided by consultants from the Program Delivery Division of Alberta Education, including consultants from Regional Offices is acknowledged. The Edmonton Regional Office solicited valuable advice from a number of school superintendents and this aided in providing a focus and direction for initial drafts. An Educational Administration 521 class and its professor also contributed reactions. David Matheson, an administrative intern, provided valuable service in reviewing more than 100 instruments.

Addison-Wesley Publishing Company extended permission to reproduce extracts from the book entitled, Evaluating Classroom Instruction: A Sourcebook of Instruments (Gary D. Borich and Susan K. Madden, 1977). Since a most challenging aspect in developing procedures for evaluating teaching is concerned with how to gather appropriate information, the authors are grateful for the contribution from this publisher.

Finally, sincere appreciation is expressed to Dilshah Bandali, Cindy Kamphius and the secretarial and support staff of Alberta Education, who ably handled successive revisions of this publication.

FOREWORD

Planning for an Evaluation of Teaching Performance comprises four separately bound volumes: A Manual of Guidelines, (Vol. I); Teacher Effectiveness: Annotated Bibliography and References, (Vol. II); Evaluation Procedures: Annotated Bibliography and References, (Vol. III); and Summaries of Instruments for Use in Evaluating Teaching Performance, (Vol. IV).

The content is delimited to gathering and interpreting information about teaching and learning in classroom settings. The main focus is on behaviors of teachers that research has shown to be consistently associated with academic learning by pupils. Some attention is also directed to several classroom behaviors of pupils often found to correlate with effective learning.

The contents of the publication are intended to be used as guidelines. Readers should feel free to reject, adapt or adopt the ideas communicated as local needs dictate. All school jurisdictions have policy and structures in place for evaluating teaching performance. Hence, selections from these volumes might be identified and used in reviewing local policies, guidelines and procedures.

The companion publication, Evaluating and Improving Teaching Performance: An Inservice Kit, by Dr. Laurie Mireau is designed primarily for inservice settings. The Inservice Kit is designed for "hands-on" experience by individuals and by groups at the school and district levels. The Kit illustrates and emphasizes practical considerations and procedures useful in evaluating classroom activities and for integrating these with supervision of instruction.

An integral part of the Kit is a set of 30 videotapes (14 training tapes and 16 demonstration tapes) involving eleven classroom teachers in Edmonton Public Schools. The reader is directed to A Manual of Guidelines, (Vol. I), Appendix 2, for detailed descriptions of the 30 videotapes. Sets of videotapes may be purchased from the School Book Branch, Alberta Education, 10410 - 121 Street, Edmonton, Alberta T5N 1L2 (Phone 403/427-2767). Purchase order forms should specify the following: number of sets, title (Evaluating and Improving Teaching Performance: Inservice Kit), format (½ inch VHS or Beta) and Attention: Mr. Ralph Goddard. The price of \$400.00 per set includes containers and shipping.

Table Of Contents

PLANNING FOR AN EVALUATION OF TEACHING PERFORMANCE

VOL I. A Manual of Guidelines

<u>Chapter</u>	<u>Page</u>
1. Introduction and Overview	1
2. Purposes and Types of Evaluations	5
3. Planning	15
4. Criteria for Use in Evaluating Teaching Performance	51
5. Understanding Observation Activities	62
6. Post Observation Activities	77
 References	
Teacher Effectiveness	83
Evaluation Procedures	108
General	128
 Appendices	
1. (a) Goals of Schooling	134
1. (b) Goals of Education	135
1. (c) The Goals of Schooling and Education Classified According to the Four Domains of the Outcomes of Education	136
1. (d) Outcomes of Education: Four Domains and Indicators Used in Their Measurement	137
2. A Description of the 30 Videotapes Produced by Dr. L. Mireau for Alberta Education as Part of an Administrator Training Package Entitled, <u>Evaluating and Improving Teaching Performance:</u> <u>An Inservice Kit</u>	138

Chapter 1

INTRODUCTION AND OVERVIEW

Introduction

To further improve the quality of education provided to students in Alberta, Alberta Education, in co-operation with school jurisdictions initiated the development of policies, guidelines, and procedures for the evaluation of students, teachers, schools, school systems, and programs.

For the background of provincial evaluation policies, and the policy and guidelines specifically for teacher evaluation, the reader is directed to Alberta Education Program Policy Manual, Third Edition 1985 (86, 90-91).

The original document Evaluation of Teaching Performance: A Manual of Guidelines was part of a pilot project which was field tested in 1984-85. Feedback from participating school jurisdictions indicated that the Manual was particularly useful as reference material. This function has been further extended in this revised edition. As with the original, this publication is intended to complement the Inservice Kit developed by L. Mireau now entitled Evaluating and Improving Teaching Performance.

Planning for an Evaluation of Teaching Performance, (Vols. I, II, III, IV) may be used by school jurisdictions to revise, adapt or redesign their local policies, guidelines, and procedures for the evaluation of individual teaching performance. The Manual of Guidelines, (Vol. I) emphasizes consideration of procedures that may be selected or adapted in accomplishing teacher evaluation policies that:

- (a) will be applicable to all teachers;
- (b) will be fair and consistent in application;
- (c) should permit consultation with teachers in the development of policy, guidelines, and procedures;
- (d) will ensure that the evaluation report is made available to the teacher in question after its completion; and
- (e) will be consistent with the principles of natural justice and provide an appeal mechanism.

Alberta Education Program Policy Manual, Third Edition 1985 (90-91).

Further, the annotated bibliographies (Vols. II and III), Teacher Effectiveness and Evaluation Procedures, provide additional information which may be useful to school boards and potential evaluators. Annotations include references regarding staff development and inservice activities for both administrators and teachers. Summaries of Instruments for Use in Evaluating Teaching Performance, (Vol. IV) provides summaries and descriptions of observation instruments which should prove useful to local jurisdictions developing their own instruments for recording observations for evaluating teaching performance.

NOTE: - Terms such as "must" and "shall" are not implied in subsequent sections of this Manual. As noted in the Foreword, users of the Manual should feel free to reject,

adapt or adopt the suggestions communicated. Local needs will dictate which suggestions are appropriate. The contents are not intended to be prescriptive.

Delimitations of the Manual

The Manual has been delimited to selected aspects of instruction that are evident in classrooms, including teaching strategies and tactics that are readily apparent, teaching behaviors, pupil perceptions about instruction, classroom transactions involving pupils and teachers, and evidence of short-and long-term planning.

The intent is to provide for valid measurement of teaching performance and an objective analysis of a lesson(s) using various observation and recording procedures which may include video or audiotape. One of the assets of such objectivity is its key role in clinical supervision. Emphasis on objectivity, for example, helps reduce the criticism that a supervisor's efforts are subjective in nature and intent. Data-based decision-making is encouraged throughout.

A second delimitation is the focus on only those aspects of instruction that research has shown to be consistently related to effective teaching. These research findings represent the **best** indications of effective teaching at the present time, but are, of course, subject to modification as a result of further research. The research literature often refer to these aspects of instruction as "teacher effectiveness criteria". The personal qualities and out-of-class behaviors of the teacher have **not** been included.

A third delimitation is imposed by the teaching performance criteria referenced and used later. The criteria selected for inclusion in the Manual are based on studies demonstrating linkages with only some of the Goals of Schooling. The outcome criteria used in these studies apply primarily to reading, arithmetic, and language in the lower elementary grades.

The 19 criteria which represent effective teaching behaviors identified in this Manual serve as the organizing principle for a) Teacher Effectiveness: Annotated Bibliography and References, (Volume II), and b) Summaries of Instruments for Use in Evaluating Teaching Performance, (Volume IV). The intent is to provide the reader with critical criteria categorized in a manageable format for developing plans for evaluation and follow-up consultation and inservice. Of more importance than the "number" of criteria is teacher involvement in the process.

It should be noted, however, that Teacher Effectiveness: Annotated Bibliography and References, (Volume II) does present research studies at the junior and senior high grade levels and in almost all subject areas.

As well, the investigations referenced do not include the important areas of development in the affective domain. The implication to users of the Manual is that if other types of learning outcomes are assigned priority then other and more appropriate teaching behaviors and classroom transactions may need to be selected for attention.

For a clearer understanding of the nature of the third delimitation the teacher is directed to Appendix I, which includes a) Goals of Schooling, b) Goals of Education, c) The Goals of Schooling Classified According to the Four Domains of the Outcomes of Education, and d) Outcomes of Education: Four Domains and Indicators Used in Their Measurement.

Finally, it is a truism that the focus and type of evaluation procedures adopted by a district will surely influence what takes place in classrooms. Teachers might well tend to teach according to the foci selected for evaluation.

An Overview of this Manual of Guidelines (Vol. 1)

Each Chapter in Volume I is now briefly described beginning with Chapter 2.

Chapter 2: Purposes and Types of Evaluations

Evaluation provides information to decision-makers. Two types of purposes associated with the evaluation of teaching performance are: 1) evaluation to provide a basis for personnel decisions and to meet the needs of accountability; and 2) evaluation to provide a basis for decisions concerning the professional development of teachers. Chapter 2 discusses the purposes of evaluation in more detail. Types of evaluations based on "who" observes teaching behaviors and classroom transactions are also reviewed. These include supervisor observation, peer observation, self-assessment, and student perceptions. Data collection other than observation is briefly examined.

Chapter 3: Planning

Chapter 3 provides a possible outline of planning activities required for the development or revision of a district's policy, guidelines and procedures for evaluating teaching performance. The planning procedures are intended to address needs at both the district (organizational) and individual levels. An inservice workshop agenda for administrators, supervising teachers, and interns, proposed by the University of Lethbridge, is also included.

Chapter 4: Criteria for Use in Evaluating Teaching Performance

Nineteen suggested criteria for use in evaluating teaching performance are described. These criteria are those identified from empirically based research as being associated with effective teaching. These criteria indicate teaching behaviors and classroom conditions under the control of the teacher that have shown over a number of studies to be consistently related to pupil learning.

Chapter 5: Understanding Observation Methods

Instrument selection is an important part of the supervision procedure and each type of instrument has advantages and disadvantages that should be considered. The following four observation types are examined and examples provided: a) rating scales, b) frequency tabulation, c) checklists, and d) free-response, narrative, or anecdotal statements.

Chapter 6: Post Observation Activities

Activities such as analysis and interpretation of data, conferencing, and record keeping are discussed in detail.

Chapter 2

PURPOSES AND TYPES OF EVALUATIONS

Evaluation Defined

What is evaluation? Can guidelines be derived from a definition of the term? The Alberta Education Program/Policy Monitoring Handbook, Special Needs Programs 1985, states:

"Evaluation" provides a judgement regarding the adequacy of results in relation to standards and objectives. Its prime purpose is to improve future performance (p. 49).

Two key components which the majority of definitions encompass are "judgement" and "standards".

Judgement or "valuing" is the determination of merit or worth, based on information. Historically, such judgements were often solely intuitive - the "gut-level" judgement. While such judgements will continue to be a valuable source of information other sources are available and should be utilized.

Secondly, a judgement regarding the adequacy of results requires a basis in standards and objectives.

The following example illustrates how an absolute standard may be used in the evaluating achievement of a district objective:

- | | |
|---|---|
| Objective: | The classroom teacher will provide an orderly but emotionally supportive environment for the child. |
| Broad/Global Characteristic: | Warm emotional climate. |
| Summary Measures of Behavior/Standards: | <ul style="list-style-type: none">A. At least _____ % of the teacher affect expressed will be positive.B. Teacher will express no more than _____ items of negative affect per observation period. |
| Specific Items of Behavior: | <ul style="list-style-type: none">A. <ul style="list-style-type: none">1) Says "Thank you" etc.2) Praises child.3) Smiles, laughs, nods.B. <ul style="list-style-type: none">1) Criticizes, blames.2) Yells.3) Scolds, humiliates. |

For more information on the observation instrument from which these examples were excerpted, see the description of Florida Climate and Control System in Volume IV.

Some of the other sources of the required standards are:

- a) baseline information describing the types and levels of teaching behaviors that precede, for example, a sequence of inservice and self-improvement activities. This provides a normative type standard for use as a referent in documenting the extent that teaching performance has improved as a consequence of the inservice.

A number of such teaching behaviors are discussed in research studies located in Teacher Effectiveness: Annotated Bibliography and References, (Volume II), particularly in the category of Classroom Management.

- b) specifications about intended teaching activities and classroom transactions.

Generally this is a component of the clinical supervision cycle. At the preobservation conference, specifications may be jointly formulated by the teacher and evaluator.

Currently, researchers in and practitioners of evaluation include in their definition the systematic collection and analysis of information to assist in making a decision. The information collected may be qualitative or quantitative in nature, but the data are collected systematically. There is a strong preference among those in this field that evaluations have utility; that evaluations provide information useful to decision makers. Types of decisions and other implications of the use of the term will be discussed later and in more detail.

Identification of Purposes

Presently there is consensus regarding two different types of purposes for teacher evaluation, ensconced in the literature as summative (for management decisions) and formative (for improvement of instruction). The decisions made occur at both the organizational and individual levels. Chart 1 illustrates the foci for decisions. Yet it should be recognized that these may be artificial distinctions. Teacher evaluation may apply to groups of teachers as well as individuals or whole schools, and may represent degrees of combined improvement and accountability concerns (as when promotion decisions are linked to improvement efforts).

There is, however, continuing debate as to whether a well designed evaluation plan can serve both purposes, or that different standards of adequacy and evidence require two distinct evaluation plans.

Currently there are some researchers (Wise and Darling-Hammond, 1984-85) who recommend that a single set of broad criteria be adopted for making judgements of "minimal competence". Such criteria should be standardized, generalizable and uniformly applied. They suggest that beyond minimal competence lie increasing degrees of competence and that the finer distinctions among good, better, and outstanding teachers require nonstandardized applications of differential criteria.

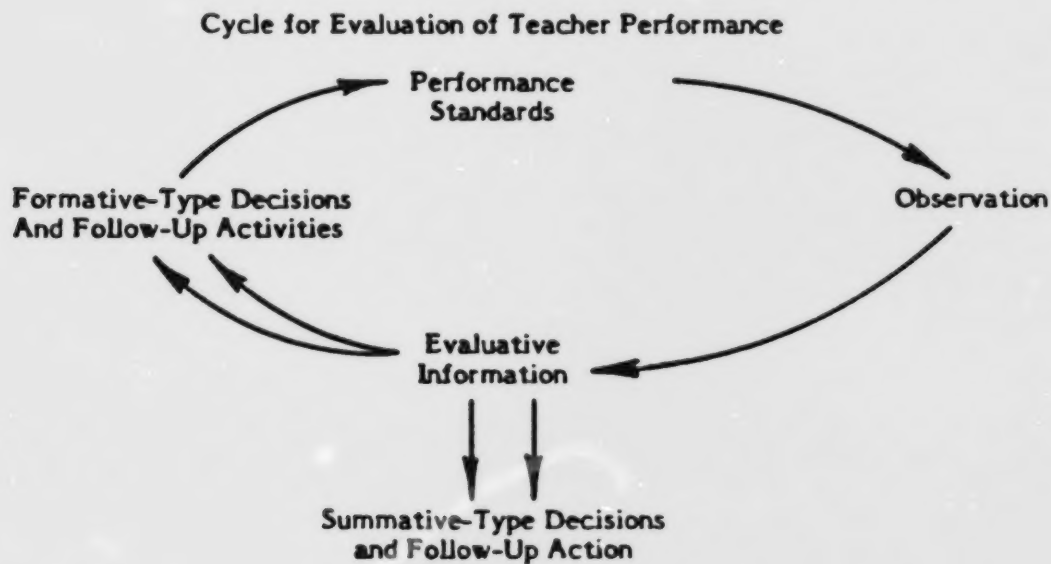
To readers familiar with R. Manatt's Supervising the Marginal Teacher, it would appear that at least a portion of what could be described as "minimal competence" (for that particular district) is M. Hunter's "Seven Steps to Lesson Design." In this videotape, the evaluators utilize observation instruments to record adherence to M. Hunter's lesson design -- the required standard.

PURPOSE	Improvement	Accountability
LEVEL	<u>Decisions re:</u>	<u>Decisions re:</u>
Individual	Inservice; individual and school staff development; allocation of resources by the school; and classroom level program development and revision; etc.	1. Certification/Tenure 2. Modification of assignments 2.1 promotion 2.2 transfer 2.3 reduction/increase of load 3. Recognition of excellence 4. Release (consistent with the principles of natural justice)
Organizational	<u>Decisions re:</u> Group Inservice; allocation of resources; school or district program development and revision; etc.	<u>Decisions re:</u> 1. Staff allocation 2. Changes in processes (e.g. teaching) in specific program 3. Program evaluation 4. Validation of the teacher selection process

Chart 1. Basic Purposes for Teacher Evaluation

Both types of purposes require an appropriate information base for decision-making. It has been argued that it is the type of decision required and not the antecedent information gathered that distinguishes between management and developmental sets of purposes. Thus the same information may be used to serve either purpose.

For example, frequently, summative-type decisions follow only after a series of formative-type evaluations have been made. The diagram below illustrates this linkage.



Time permitting, the above sequence would ideally have the evaluator conducting a series of formative-type evaluations with each attending to specific aspects of instruction. The result would be an aggregation of detailed, analytical information required as a basis for conferencing and supervising instruction. This source of information could provide an adequate basis for the global, overall ratings required for summative evaluations.

Both purposes are legitimate. Both contribute to the improvement of student growth. However, if a program of teacher evaluation is to be successful, the **purposes** of the program must be **identified, discussed, and agreed** upon by all who are involved in the process. Statements of purpose that are clear, precise, and complete are more likely to produce a sound basis for open communication, co-operative relationships, and effective programs.

In some studies, supervisors saw merit in a team approach to some management-type evaluations because the team shared the responsibility for making difficult judgements while reducing the risk of a teacher receiving a prejudicial evaluation from one supervisor. Independent evaluations by several competent evaluators will enhance the reliability of the information gathered. As a consequence, a more valid appraisal is likely.

Many of those who insist a clear distinction be made regarding "summative" and "formative" evaluations also argue that the same person(s) should not do both. Others, particularly those focusing on a "school effectiveness" program, recommend that it should be the same person, specifically the principal. Whatever the purpose, and whoever the evaluator, it is imperative that data be systematically collected.

Systematic Collection of Information

Collecting and processing information in a systematic manner, a condition included in one definition for evaluation, represents a contrast to haphazard, incomplete, and unplanned activity. Evaluation, like most endeavours in education, is not new. The "new look" in evaluation results from changes in emphasis in collecting relevant information and in increased accountability. This requires the need for a plan, an evaluation design, and a defensible set of procedures.

Key Aspects of an Evaluation Plan

Having an evaluation plan in place indicates that the evaluation process is formalized in advance of implementation. To devise or redesign such a plan the reader is directed to the next chapter, "Planning". At this point, several aspects that administrators and educational researchers (Newberry, 1984; Beckham, 1981; Natrielle and Dornsbush, 1980-81) caution must be contained in an evaluation plan are discussed.

1. **The teacher must have prior knowledge of the selected criteria and processes employed.** This should include the overall district's goals and objectives as well as the school's evaluation plan and process. It has been suggested that administrators devise systems in which the procedures are sufficiently specific to produce general agreement and consistency among different evaluators. This may be accomplished by developing a plan which clarifies task allocations and the criteria used for assessing performance. In addition, the plan should be reviewed periodically to provide for changing district and school priorities.
2. **The teacher must be aware of the intended purpose of the evaluation.** In other words, the type of decision(s) which can be expected following the evaluation should be communicated.
3. **The teacher must have an opportunity to consider and adopt the recommendations.** Generally it is agreed that "marginal" teachers should be identified quickly at the beginning of a school term. Evaluators must then provide feedback, even negative feedback, more frequently than is probably the case now. Studies show that almost all teachers indicate a need for more feedback.

Increasingly, there has been a concentrated focus to incorporate the evaluation process within the clinical supervision model (preobservation conference, observation, evaluation, postobservation conference, inservice cycle). The Audio-Visual Section of the Teacher Effectiveness: Annotated Bibliography and References, (Vol. II) provides descriptions of materials which may be utilized for inservice activities and staff development. These descriptions have been categorized according to the 19 criteria of teaching effectiveness and listed for reader convenience. There has been no attempt to evaluate the materials.

4. **The evaluation procedures must provide for appeal of judgements made.** The Alberta Education teacher evaluation policy guidelines state that local teacher evaluation policies "will be consistent with the principles of natural justice and provide an appeal mechanism." The Alberta Education Program Policy Manual, Third Edition (94) includes the following definition:

The Rules of Natural Justice or the duty to be fair means that a person, tribunal or other entity charged with adjudicating disputes between persons whose legal rights and interests may be affected must give those persons a reasonable opportunity of presenting their case, listen fairly to both sides and reach a decision untainted by bias.

5. **Evaluation statements must be documented.** Data systematically collected permits a more objective analysis and facilitates report writing. Chapters 5 and 6 of this Manual include information in this area. L. Mireau's Inservice Kit, Evaluating and Improving Teaching Performance, contains a section on the writing of reports. As well, the reader is directed to Evaluation Procedures: Annotated Bibliography and References, (Vol. III), particularly the sections entitled "Planning for an Evaluation of Teaching Performance" and "Follow-up, 3. Report Writing."

Observations of Teaching Behaviors and Classroom Transactions

The specification of purpose provides direction for what to observe and record during an evaluation. For systematic observation it is recommended that where it is feasible low-inference instruments for recording teaching behaviors and classroom transactions be selected. Data collected on high-inference rating scales or through the use of high-inference methods are often not as valid a source of information due to their subjectivity and low reliability.

As previously stated, teachers being apprised of an evaluation on their teaching performance should know the time and frequency of classroom visits, the purpose(s) for the evaluation, as well as the criteria employed by the evaluator. The importance of an evaluation plan cannot be over emphasized.

Supervisor Observation

In fulfilling the leadership role of monitoring instruction within a school jurisdiction, evaluations of teacher performance often include formal, systematic observations by one or a combination of the following persons: superintendents, assistant superintendents, consultants or supervisors, principals, assistant principals, and department heads.

Some suggestions include:

1. To overcome teacher and pupil behavior alterations during an in-class observation frequent visits to acclimatize the teacher and students to an outsider's presence could be made.
2. To reduce subjectivity in the employment of rating scales supervisors should be trained to recognize their own bias. Too often a rating scale is unduly influenced

by the "halo effect" produced by the teacher, rather than his/her actual classroom performance.

3. To increase reliability in observing performance and recording on observation instruments supervisors should be trained in the selected observation method. Readers are directed to the section on Audio-visual Materials in Evaluation Procedures: Annotated Bibliography and References, Vol. III, and to L. Mireau's Evaluating and Improving Teaching Performance: An Inservice Kit.

Peer Observation/Colleague Evaluation

Systematic observations may also include the use of colleagues to provide an information base. Records of in-class observations or observations recorded on audiotapes or videotapes may be displayed on a predetermined instrument. It is highly recommended that teachers who become involved in colleague evaluation performance reviews be trained in observing and recording techniques.

The recent literature regarding peer evaluation has resulted in mixed reactions from supervisors and teachers (Darling-Hammond, et al, 1983). McFaul and Cooper (1984) conducted research in which twelve teachers participated in a colleague appraisal study following the clinical model of teacher supervision. The resulting supervision proved to be superficial in most cases because of time constraints, lack of planning at the pre-conference level, inadequate instruments, and absence of an indepth analysis. Grossnickly and Cutter (1984), however, suggest that with the assistance of para-professionals, colleague supervision could be a success.

While conducting their study, Bird and Little (1983) discovered that teachers are negative about peer coaching. Teachers consider the activity a delicate matter and associate peer coaching with evaluation. Teachers expressed reservations about being observed, and also about observing: "Who am I to evaluate my colleague? We're being trained at the same time." The researchers suggest that colleague supervision take the form of coaching rather than evaluation, and that teachers be made aware of the difference.

Self-Assessment

Most teachers evaluate their performance daily. Did the lesson go well? If not, what can be changed -- content? delivery? closure? Were my objectives met? Will certain concepts or information require reteaching? Generally, notes are made directly on the lesson plans or daily plans.

Yet all types of collected data will assist the teacher to self-evaluate. For example, a recording instrument may be employed while the teacher views videotapes or listens to audiotapes of his/her own classroom situation. A feedback system is recommended that would include supervisors and/or colleagues assisting the teacher in interpreting the results. Videotapes and audiotapes are extremely useful as a tool in the self-appraisal process because a teacher may repeat the tape, observing and recording different behaviors each time. One tape, then, could provide a teacher with sufficient data to develop a very clear performance portrait of different aspects of teaching.

In addition, a teacher may use observation/recording instruments and rating scales to record predictions of the occurrence of specific behaviors or transactions. Alternatively, the same means may be used to describe what ought to be a desired set of

behaviors, i.e., to establish minimum personal standards. These predictions, expectations, or standards may subsequently be compared with observations of actual performance or with descriptions provided by students.

Student Perception

Several research studies (Cohen, 1982; Gilman, 1983) have been completed recently in the area of student perceptions of teaching behaviors and classroom situations. These studies indicate a relatively high level of reliability for perceptions recorded by groups of students when results are compared to observations recorded by trained professionals.

Feedback from students to the teacher (like feedback from teacher to student) in the form of recording descriptions of teaching behaviors is useful in assisting the teacher in monitoring teaching behaviors.

Students should only be asked to record their responses about appropriate teaching behaviors and classroom transactions, i.e., classroom events that are clearly observable and that are relevant to effective instruction. Students should not be asked to report judgements or to undertake ratings. Instead, they can be asked to describe classroom happenings; the judging and rating tasks are assigned to the teacher and the evaluator.

Long-range as well as short-term effects on students must be considered as part of the evaluation process. Data regarding student perceptions may be gathered by the following methods: low-inference instruments completed by students at the end of a lesson or unit; high-inference descriptions of perceptions at the completion of a lesson, unit, or year; and interview of students by teacher or teacher supervisor.

Data Collection (other than Observation)

Since the focus of this Manual is teaching performance (specifically, in-class teaching behaviors), documents which may be analyzed and utilized are only briefly described below. Their importance as a source of data which may be used to complement teaching performance information is fully recognized. In providing a more holistic view of teaching performance, many researchers recommend the use of supplementary sources of data collecting and documentation. These may include teacher documents and student outcomes.

1. Teacher Documents:

Organizational skills of a teacher may be inferred, in part, from the teacher's records of short- and long-range plans and their appropriateness, having regard to classroom variables such as course content and student characteristics. Records refer to the teacher's chronicles of student achievement, student behavior, and anecdotal accounts of classroom activities.

Shavelson and Stern (1981) summarize the results of teacher planning in their review. "A central focus of teachers is the activity developed in the lesson plan. Activity refers to the allocation of time, the sequencing and the time (pacing or flow) of content and the materials during the lesson" (p.481). They also discovered that "teachers consider information about students, especially student ability, when planning instruction" (p.480).

2. Student Outcomes

Indicators of pupil performance, the content, scope, and sequence of instruction, and expectations set by the teacher are provided by the records of the following:

- o Achievement - scores on standardized tests, teacher-made tests, and assignments.
- o Materials and Products - notebooks, completed assignments, Industrial Arts, and Home Economics products, etc.
- o Indications of teacher feedback to students concerning the above.

The clarity, neatness, thoroughness, and accuracy of work completed by students is an indication of a standard set by the teacher in the classroom.

While the prime function of teacher evaluation is to improve future performance, its pivotal role as shown in the "more effective schools" research cannot be over emphasized. For example, one of the characteristics of "more effective schools" is the high level of expectations for learning and behavior (Goodlad, 1983). Thus the criterion of "high expectations" may be an individual goal, a group goal, or a school goal, and may be included in evaluations.

In summary, the following figure illustrates how evaluation results can be used to assist in improving the quality of education delivered to students.

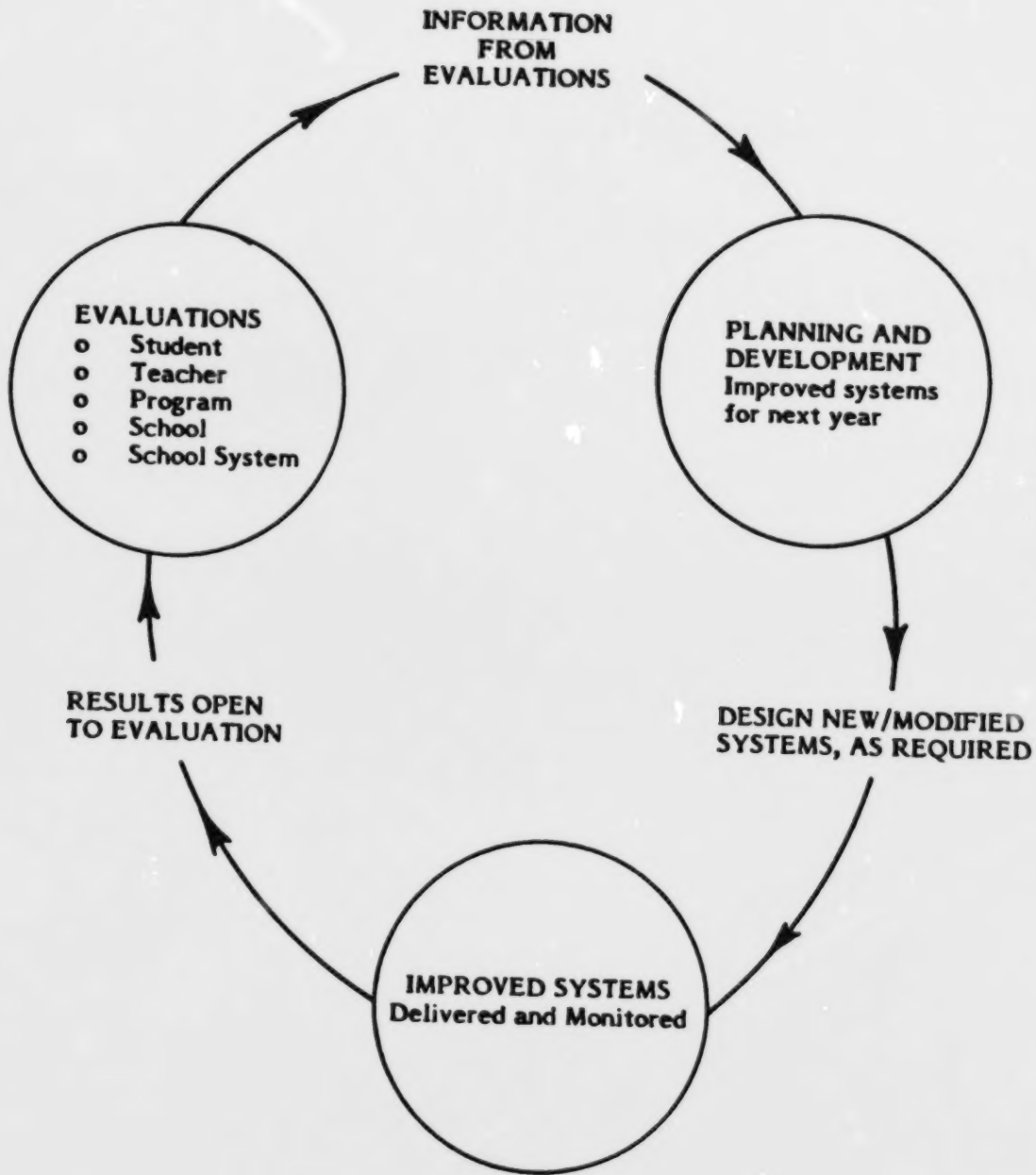


Figure 1: Phases of the Management Cycle.

Chapter 3

PLANNING

Users of the Manual will need to plan the activities required for the development or reworking of their district's policy, guidelines, and procedures for evaluating teaching performance. The flowchart (p. 18) and the task summaries provided in this section reflect one approach that might be considered in planning. The approaches used are suggestive only; users will probably adapt and modify these suggestions in the light of local circumstances.

The task summaries may serve several purposes. The first and obvious use is for the developing of local plans. A second use could be a checklist for monitoring the progress of planning. A third purpose is as a referent for use in evaluating the plan, e.g., determining the extent to which the "purposes" outlined on the various worksheets were achieved.

Though local school districts have developed their own plans for evaluating teaching performance, this chapter is included in this document to emphasize throughout the planning stages the importance of:

- a) an underlying rationale for the activity, i.e. philosophy, purposes, principles, assumptions, and the relevance (empirical base) of the information gathered;
- b) the thoroughness and adequacy of planning for the evaluation and its use -- a comprehensive and well designed evaluation plan(s), for example, should depict procedures consistent with the principles of natural justice; and
- c) the fidelity with which the plan is implemented and the appropriateness of follow-up activities. Recent reviews of evaluation systems presently in place in the United States indicate that successful evaluation plans have two components in common - - commitment and collaboration.

Many administrators also recommend the study of other teacher evaluation models, and a review of research on teaching and learning in the initial planning stages. For the former, the reader is directed to the first section "Planning for the Evaluation of Teaching Performance" in Vol. III, Evaluation Procedures: Annotated Bibliography and References; for the latter, Vol. II, Teacher Effectiveness: Annotated Bibliography and References.

Monitoring and Evaluating the Evaluation Process

The concepts of monitoring and evaluating are connected. They need to be viewed as occurring in a temporal sequence i.e. monitoring first followed by evaluating. The sequence and contingencies are illustrated as follows:

1. Monitoring pertains to gathering relevant information. No judging or valuing occurs during monitoring activities except with respect to the appropriateness and validity of the data collected.

2. Evaluating requires the application of standards to the information gathered in 1 above. Applying standards facilitates interpreting the data, making judgements and assigning a value to the aspect of the program being considered.

For example, aspects of the program or system for evaluating teaching performance might include a) the planning and development procedures employed; b) the product(s) of planning i.e. the policy, guidelines and procedures; c) mechanisms and procedures actually deployed during implementation; and d) the results of impact of implementation on client groups.

The standards applied in evaluating planning might be the degree to which the purposes enumerated on the planning worksheets (which follow) were achieved. In evaluating the products of planning (e.g. statements of evaluation policies and procedures) the judgements of competent professionals are appropriate. For evaluations of the implementation of structures and processes one standard is the fidelity with which the plan was implemented, i.e. the degree of adherence to the school district's policy, guidelines, and procedures during and following evaluations. Results might include documentation about decisions taken on the basis of evaluations, and documentation of follow-up actions related to these decisions. Standards which are applicable in evaluating the impact or results aspect of the program include securing answers to questions such as "Were decisions made? Were the decisions clearly stated and recorded? Where the decisions acted upon? Were the follow-up activities appropriate? Were the follow-up activities effective?"

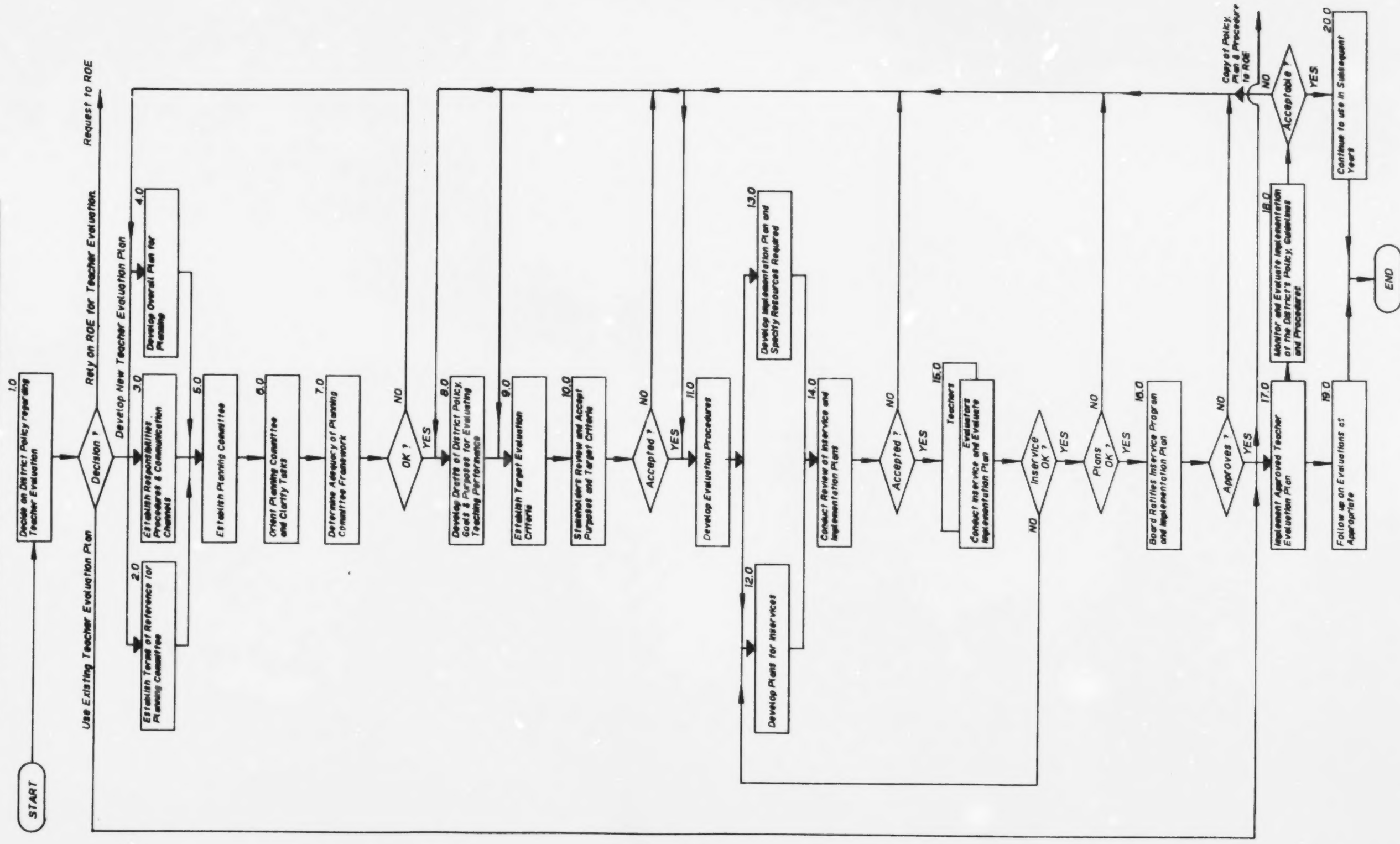
Chart 2 summarizes the foregoing. It elaborates somewhat on the details for Task 18 in this chapter.

For suggestions on monitoring guidelines and possible formats for monitoring the evaluation process, the reader is directed to Alberta Education's Policy/Program Monitoring Handbook (Special Needs Programs), 1985.

PROGRAM COMPONENT	MONITORING Data Collected	EVALUATING Questions to be answered by applying standards
Planning and develop- ment activities	Records of planning, interviews	How well were the pur- poses for each planning step achieved? (See Planning Worksheet, Task 3.)
Products of planning: statements of policy, guidelines and proce- dures	Printed statements and related materials	<u>Refer to Program/Policy Monitoring Handbook.</u>
Implementation (of local policy, guidelines and procedures)	Diary records, restro- spective perceptions of participants	How closely does imple- mentation match the plan?
Results	Records of decisions and follow-up action plans. Records of per- ceptions and observa- tions about effects.	Were decisions made? Did planning for follow- up occur? Were the plans for follow-up appropriate? Were the follow-up activities effective?

Chart 2: Aspects of a Program for Evaluating Teaching Performance

PLANNING / IMPLEMENTATION / REVIEW FLOWCHART



SUMMARY OF TASKS

The numbering which follows relates to the numbered functions on the flow chart.

1.0 Decide on District Policy Regarding Teacher Evaluation

- 1.1 Review existing district policies, guidelines, and procedures for evaluation of teaching performance
- 1.2 Decide to retain or review/revise existing plan, or develop new plan
- 1.3 Secure board ratification for further activity

2.0 Establish Terms of Reference for Planning Committee

- 2.1 Establish Terms of Reference for a Planning Committee

3.0 Establish Responsibilities, Procedures, and Communication Channels

- 3.1 Establish Planning Committee responsibilities and processes (chairperson, secretary, minutes, quorum, policies, etc.) including mechanisms for two-way communications with Central Office and other participants.

4.0 Develop Overall Plan for Planning

For each task allocated in 2.1

- 4.1 Develop time lines
- 4.2 Identify and select resources
- 4.3 Specify who is responsible

5.0 Establish Planning Committee

- 5.1 Establish a Planning Committee comprising representatives of groups participating in teacher evaluation

6.0 Orient Committee and Clarify Tasks

Orient the committee regarding the following:

- 6.1 Terms of Reference from Task 2
- 6.2 Responsibilities and Procedures from Task 3
- 6.3 Committee's Overall Plan from Task 4
- 6.4 Involvement of participating groups

7.0 Determine Adequacy of Planning Committee Framework

- 7.1 Review the outputs from Task 6

8.0 Develop Drafts of District Policy, Goals and Purposes for Evaluating Teaching Performance

- 8.1 Review and discuss the inputs
- 8.2 Prepare draft statements of school system's policy for evaluating teaching performance
- 8.3 Prepare draft sets of purposes for evaluating teaching performances

9.0 Establish Target Evaluation Criteria

- 9.1 Review relevant empirically-based research literature
- 9.2 Analyze the conclusions from 9.1
- 9.3 Select the behaviors, transactions, and products (criteria) to be identified with each set of purposes established from Task 8
- 9.4 Organize/categorize the criteria

10.0 Stakeholders Review and Accept Purposes and Target Criteria

- 10.1 Prepare survey form(s) for use in eliciting/soliciting perceptions of stakeholder groups about purposes for evaluating teaching performance and about the criteria selected
- 10.2 Implement the two-way communication system
- 10.3 Process and analyze the responses
- 10.4 Make revisions

11.0 Develop Evaluation Procedures

For each criterion delineated in 9.3, or sets of criteria:

- 11.1 Select or develop procedures for collecting information, e.g., instruments for use in observing/recording teaching behaviors and classroom transactions, pupils' products and relevant documentation, training observer-recorders, and scheduling
- 11.2 Establish realistic and defensible standards (intentions, expectations)
- 11.3 Select and develop procedures for analyzing information

- 11.4 Select and develop procedures for interpreting information (judging, valuing, rating, applying standards, i.e., comparing intentions and observations) for each set of purposes delineated in 8.3
- 11.5 Develop procedures for reporting observations and ratings
- 11.6 Conduct field trials and/or validation studies of these procedures (may be considered optional)
- 11.7 Identify the evaluators

12.0 Develop Plan for Inservice

- 12.1 Identify and select appropriate resource person(s)
- 12.2 Solicit input from 12.1
- 12.3 For each evaluation focus (i.e., district level or individual level):
 - 12.3.1 Select inservice trainees
 - 12.3.2 Plan scope (knowledge, skills, attitudes) and sequence (ordering activities, opportunities for practice, feedback, and consultation)
 - 12.3.3 Plan instructional procedures including media and materials required
 - 12.3.4 Schedule events
 - 12.3.5 Prepare budget
 - 12.3.6 Prepare plan to evaluate the inservice

13.0 Develop Implementation Plan and Specify Resources Required

- 13.1 Determine frequencies of evaluations of teaching performance for the following teachers: (a) probationary (new to the system), (b) tenured, (c) substitute, (d) temporary contract
- 13.2 Designate who may initiate evaluations in various circumstances
- 13.3 Identify who may serve as evaluators for those evaluations noted in 13.2
- 13.4 Delegate to schools and/or central office departments responsibilities for scheduling evaluations
- 13.5 Specify resources and support services required
- 13.6 Develop procedures consistent with the principles of natural justice and which provide an appeal mechanism
- 13.7 Determine how records of evaluations are maintained, distributed and accessed
- 13.8 Develop provisions for systematic monitoring and evaluating of policy, guidelines, and procedures, e.g. participation, frequency and initiation

14.0 Conduct Review of Inservice and Implementation Plans

- 14.1 Elicit/solicit opinions of potential implementers and users
- 14.2 Solicit advice from resource personnel
- 14.3 Analyze and summarize 14.1 and 14.2
- 14.4 Make revisions

15.0 Conduct Inservice and Evaluate Implementation Plan

- 15.1 Implement the Inservice Program
- 15.2 Elicit/solicit opinions regarding Inservice Program
- 15.3 Elicit/solicit opinions regarding Implementation Plan
- 15.4 Decide to recommend acceptance or revision of the Inservice Program and Implementation Plan
- 15.5 Forward a copy of policy, guidelines, procedures, and plans to Regional Office of Education

16.0 Board Ratifies Inservice Program and Implementation Plan

- 16.1 Presentation of recommendation with documentation to Board of Trustees
- 16.2 Board decides

17.0 Implement Approved Teacher Evaluation Plan

- 17.1 Provide evaluation staff and resources
- 17.2 Arrange at central office and schools for scheduling and evaluator assignments

18.0 Monitor and Evaluate the Implementation of District's Policy, Guidelines, and Procedures

- 18.1 Identify and select monitors and evaluators
- 18.2 Plan and implement procedures for collecting the necessary information (monitoring)
- 18.3 Plan and implement procedures for analyzing and interpreting the information (evaluating)

- 18.4 Plan and implement the reporting of conclusions and recommendations
- 19.0 **Follow-up Evaluations as Appropriate**
 - 19.1 Appropriate decision-makers (including teachers) receive and consider evaluation reports
 - 19.2 Plan appropriate follow-up needs at district and individual levels

If the planning process needs further detail, the following pages contain worksheets for each of the 19 steps in the planning process.

PLANNING WORKSHEET

TASK CATEGORY: 1.0 Decide on District Policy
Regarding Teacher Evaluation

SPECIFIC TASKS:

- 1.1 Review existing district policies, guidelines, and procedures for evaluation of teaching performance
- 1.2 Decide to retain or review/revise existing plan, or develop new plan
- 1.3 Secure board ratification for further activity

PURPOSE:

1. To secure needs assessment information concerning the adequacy and appropriateness of existing policies, guidelines, and procedures
2. To provide a rationale for the decision required

INPUT:

1. Existing district policies, procedures, guidelines
2. Relevant research literature, policies from other systems (see Evaluation Procedures: Annotated Bibliography and References, (Vol. III))
3. A Manual of Guidelines, (Vol. I) of Planning for an Evaluation of Teaching Performance

OUTPUT: Decision to a) use existing teacher evaluation plan, b) review and revise existing plan, c) develop new plan, or d) rely on Regional Office of Education for teacher evaluation

PERSONNEL: Central Office
Administrators
School Administrators
Board of Trustees

GUIDING PRINCIPLES OR ASSUMPTIONS:

The recent priority assigned to evaluating teaching performance suggests a need to review existing systems.

Research literature recommends an annual review of a district's evaluation plan.

PLANNING WORKSHEET

TASK CATEGORY: 2.0 Establish Terms of Reference for
 Planning Committee

SPECIFIC TASKS:

- 2.1 Establish Terms of Reference for a Planning Committee, e.g., responsible for:
 - 2.1.1 Preparing drafts of policy, guidelines, and procedures
 - 2.1.2 Establishing and using mechanisms for two-way communication re: 2.1.1
 - 2.1.3 Revising successive drafts on basis of input from stakeholder groups
 - 2.1.4 Planning orientation and training
 - 2.1.5 Planning implementation
 - 2.1.6 Planning procedures for monitoring and revising

PURPOSE To clarify the general and specific tasks assigned to the Planning Committee

INPUT:

- 1. Mission statements, policy statements, etc., regarding evaluation that are currently in place in the school district
- 2. Board and/or executive commitment that planning the development or revision of policies, guidelines, and procedures should proceed

OUTPUT:

- 1. Terms of Reference for Planning Committee, including school system mission statements reflecting goals for evaluating instruction
- 2. Providing for initial clarity

PERSONNEL: Central Office

GUIDING PRINCIPLES OR ASSUMPTIONS:

The purposes of teacher evaluation programs should grow out of clearly stated goals of the school system and should contribute to the accomplishment of these goals.

PLANNING WORKSHEET

TASK CATEGORY: 3.0 Establish Responsibilities, Procedures,
and Communication Channels

SPECIFIC TASKS:

- 3.1 Establish Planning Committee responsibilities and processes (chairperson, secretary, minutes, quorum, policies, etc.) including mechanisms for two-way communications with Central Office and other participants.

PURPOSE:

1. To clarify what is expected of the Planning Committee in terms of goals and operational procedures
2. To clarify what is expected of other groups that may be involved in the evaluation process

INPUT:

1. Provincial policies and guidelines concerning teacher evaluation
2. Mission statements, policy statements, etc., regarding evaluation that are currently in place in the school district
3. Terms of Reference from Task 2

OUTPUT: Clarification and initial amplification of the Terms of Reference

PERSONNEL:

- Alternatives - Central Office
- Planning Committee
- Planning Committee Executive

GUIDING PRINCIPLES OR ASSUMPTIONS:

Clarity of charge and role are crucial to optimize understanding among all groups.

PLANNING WORKSHEET

TASK CATEGORY: 4.0 Develop Overall Plan for Planning

SPECIFIC TASKS:

For each task allocated in 2.1

- 4.1 Develop time lines
- 4.2 Identify and select resources
- 4.3 Specify who is responsible

PURPOSE: To clarify what is expected of the Planning Committee in terms of task completion

INPUT:

- 1. Terms of Reference from Task 2
- 2. Responsibilities and Procedures from Task 3
- 3. Communication channels from Task 3

OUTPUT: Clarification and initial amplification of the Terms of Reference

PERSONNEL:

- Alternatives - Central Office
- Planning Committee
- Planning Committee Executive

GUIDING PRINCIPLES OR ASSUMPTIONS:

Clarity of charge and role are important in improving the efficiency of the Planning Committee.

PLANNING WORKSHEET

TASK CATEGORY: 5.0 Establish Planning Committee

SPECIFIC TASKS:

- 5.1 Establish a Planning Committee comprising representatives of groups participating in teacher evaluation

PURPOSE: To provide a structure for planning that enhances the probability that the varying perspectives of participating groups are considered

INPUT: Staff and membership lists

OUTPUT: Establishment of the Planning Committee

PERSONNEL: Central Office

GUIDING PRINCIPLES OR ASSUMPTIONS:

Involvement of teachers and administrators who will implement the policy, guidelines, and procedures will produce a better plan, enhance communication, and foster internalization of the rationale, purposes, and procedures for teacher evaluation.

PLANNING WORKSHEET

TASK CATEGORY: 6.0 Orient Committee and Clarify Tasks

SPECIFIC TASKS:

Orient the committee regarding the following:

- 6.1 Terms of Reference from Task 2
- 6.2 Responsibilities and Procedures from Task 3
- 6.3 Committee's Overall Plan from Task 4
- 6.4 Involvement of participating groups

PURPOSE:

- 1. To clarify what is expected of the Planning Committee in terms of goals, task completion, and operational procedures
- 2. To clarify what is expected of other groups that may be involved in the evaluation process

INPUT:

- 1. Provincial policies and guidelines concerning teacher evaluation
- 2. Mission statements, policy statements, etc., regarding evaluation that are currently in place in the school district
- 3. Terms of Reference from Task 2
- 4. Responsibilities and Procedures from Task 3
- 5. Committee's Overall Plan from Task 4

OUTPUT: Clarification and initial amplification of the 1) Terms of Reference and 2) Committee's responsibilities and task commitments

PERSONNEL:

- Alternatives - Central Office
- Planning Committee
- Planning Committee Executive

GUIDING PRINCIPLES OR ASSUMPTIONS:

PLANNING WORKSHEET

TASK CATEGORY: 7.0 Determine Adequacy of Planning Committee Framework

SPECIFIC TASKS:

7.1 Review the outputs from Task 6

PURPOSE: To decide on any revisions or clarifications

INPUT:

1. Terms of Reference from Task 2
2. Responsibilities and Procedures from Task 3
3. Committee's Overall Plan from Task 4

OUTPUT:

1. Final clarification and amplification regarding the inputs noted above
2. A decision to proceed or revise

PERSONNEL: Planning Committee

GUIDING PRINCIPLES OR ASSUMPTIONS:

The Planning Committee should be offered opportunity to provide input.

PLANNING WORKSHEET

TASK CATEGORY:

8.0 Develop Drafts of District Policy, Goals and Purposes for Evaluating Teaching Performance

SPECIFIC TASKS:

- 8.1 Review and discuss the inputs enumerated below
- 8.2 Prepare draft statements of school system's policy for evaluating teaching performance
- 8.3 Prepare draft sets of purposes for evaluating teaching performances from the following perspectives:
 - 8.3.1 Organizational level
 - 8.3.2 Individual level
 - 8.3.3 Improvement of instruction decisions
 - 8.3.4 Accountability decisions

PURPOSE:

- 1. To delineate the purposes to be served (the "why") by evaluating teaching performance
- 2. To delineate the purposes from the perspective of the school system and the individual school/teacher levels

INPUT:

- 1. Provincial Evaluation Policy Statements
- 2. School system's statements of mission and goals
- 3. Relevant literature, e.g., Volumes II and III of this Manual, ATA policy and papers, articles from periodicals, policies from other school jurisdictions, etc
- 4. Goals of Education and Goals of Schooling (see Appendix II, Vol. I)
- 5. Local contributions
- 6. Terms of Reference from Task 2

OUTPUT: Draft statements of policies and purposes (see next page)

PERSONNEL: Central Office
Planning Committee
Planning Committee Executive

GUIDING PRINCIPLES OR ASSUMPTIONS:

The function of evaluation is to facilitate the accomplishment of the goals of the organization; therefore, the purposes of evaluation should be established following a complete review of the school district goals. When this has been done, the purposes of evaluation are more likely to be compatible with and contribute to school district goals. If the program is to be successful, these purposes must be identified, discussed openly, understood, and agreed upon by all participants who may potentially become involved.

PURPOSE	Improvement	Accountability
LEVEL	<u>Decisions re:</u>	<u>Decisions re:</u>
Individual	Inservice; individual and school staff development; allocation of resources by the school; and program development and revision; etc.	1. Certification/Tenure 2. Modification of assignments 2.1 promotion 2.2 transfer 2.3 reduction/increase of load 3. Recognition of excellence 4. Release (consistent with the principles of natural justice)
Organizational	<u>Decisions re:</u> Group Inservice; allocation of resources; program development and revision; etc.	<u>Decisions re:</u> 1. Staff allocation 2. Changes in processes (e.g. teaching) in specific program 3. Program evaluation 4. Validation of the teacher selection process

Chart 1. Basic Purposes for Teacher Evaluation

PLANNING WORKSHEET

TASK CATEGORY: 9.0 Establish Target Evaluation Criteria

SPECIFIC TASKS:

- 9.1 Review relevant empirically-based research literature
- 9.2 Analyze the conclusions from 9.1
- 9.3 Select the behaviors, transactions, products (criteria) to be identified with each set of purposes established from Task 8
- 9.4 Organize/categorize the criteria

PURPOSE: To identify and select defensible and appropriate teacher behaviors, classroom transactions, and products under the control of the teacher that will provide a focus for evaluating teaching performance, i.e., delineating the "what" for each set of purposes

INPUT:

1. Reviews of the empirically-based research literature and conclusions about teaching behaviors and classroom activities most consistently associated with student learning (see L. Mireau's Evaluating and Improving Teaching Performance: An Inservice Kit)
2. Planning for an Evaluation of Teaching Performance, (Vol. I and Vol. II)
3. Further analyses of (1) in terms of contingencies such as desired outcomes (e.g., cognitive, affective), type of pupil served, and learning environments
4. Terms of Reference from Task 1
5. Responsibilities and Procedures from Task 3
6. Committee's Overall Plan from Task 4
7. Draft set of purposes from Task 8

OUTPUT: Sets of teaching behaviors, classroom activities, and products (all amenable to teacher influence and control) from which selections will be made to provide a focus for evaluation

PERSONNEL: Alternatives - Organizational - Central Office
- Planning Committee
- Planning Committee Executive
- Individual - Teacher/Evaluator representatives

GUIDING PRINCIPLES OR ASSUMPTIONS:

When decisions regarding the development of criteria are based upon empirically-supported and rational considerations, appropriateness, relevance and usability are more likely to be ensured. Involving teachers as well as other members of the educational community in the development of criteria may help establish more accurately defined criteria and may improve the morale of the professional staff. Purposes remain a central focus for evaluation of teaching performance.

It is important to recognize that the criteria selected in this step will influence what happens in the classroom in the future. In order not to inhibit innovation and risk-taking in the classrooms, the evaluation procedures should be designed with some degree of flexibility.

PLANNING WORKSHEET

TASK CATEGORY: 10.0 Stakeholders Review and Accept
Purposes and Target Criteria

SPECIFIC TASKS:

- 10.1 Prepare survey form(s) for use in eliciting/soliciting perceptions of stakeholder groups about purposes for evaluating teaching performance and about the criteria selected
- 10.2 Implement the two-way communication system
- 10.3 Process and analyze the responses
- 10.4 Make revisions

PURPOSE:

1. To improve the statements of policy, purposes, and descriptions of selected criteria with respect to clarity, understandability, and feasibility
2. To facilitate early identification with, commitment to, and understanding of, the planning activities by participating stakeholder groups
3. To ensure that the criteria selected for focus are identified with a particular set of purposes

INPUT:

1. Policy statement and sets of purposes, established in Task 8
2. Target criteria from Task 9
3. Utilization of the two-way communication system set in place
4. Terms of Reference from Task 2
5. Responsibilities and Procedures from Task 3
6. Committee's Overall Plan from Task 4

OUTPUT:

1. Revised statements of policy and purpose(s)
2. Selected criteria

PERSONNEL: Planning Committee

Plus participants in the two-way communication system

GUIDING PRINCIPLES OR ASSUMPTIONS:

The effective utilization of the two-way communication system set in place will enhance communication and foster internalization of the policy, purposes, and descriptions of selected criteria.

PLANNING WORKSHEET

TASK CATEGORY: 11.0 Develop Evaluation Procedures

SPECIFIC TASKS:

For each criterion delineated in 9.3, or sets of criteria:

- 11.1 Select or develop procedures for collecting information, e.g., instruments for use in observing/recording teaching behaviors and classroom transactions; pupils' products and relevant documentation; training observer-recorders; and scheduling
- 11.2 Establish realistic and defensible standards (intentions, expectations)
- 11.3 Select and develop procedures for analyzing information
- 11.4 Select and develop procedures for interpreting information (judging, valuing, rating, applying standards, i.e., comparing intentions and observations) for each set of purposes delineated in 8.3
- 11.5 Develop procedures for reporting observations and ratings
- 11.6 Conduct field trials and/or validation studies of these procedures (may be considered optional)
- 11.7 Identify the evaluators

PURPOSE: To select/develop appropriate and feasible procedures for collecting, analyzing, interpreting, and reporting evaluation information

INPUT:

- 1. Revised sets of purposes from Task 10
- 2. Revised pool of criteria from Task 10
- 3. Revised descriptions of criteria from Task 10
- 4. Teachers' job descriptions
- 5. Observation instruments
- 6. Terms of Reference from Task 2
- 7. Responsibilities and Procedures from Task 3
- 8. Committee's Overall Plan from Task 4

OUTPUT: A set of procedures to accomplish specific purposes

PERSONNEL: Planning Committee

GUIDING PRINCIPLES OR ASSUMPTIONS:

The essential components of the evaluation process should be in place and known to teachers before inservice and implementation begin. Comprehensive policy statements and procedures should be clarified to all participants in advance of implementation.

PLANNING WORKSHEET

TASK CATEGORY: 12.0 Develop Plan for Inservice

SPECIFIC TASKS:

- 12.1 Identify and select appropriate resource person(s)
- 12.2 Solicit input from 12.1
- 12.3 For each evaluation focus (i.e., district level and individual level)
 - 12.3.1 Select inservice trainees
 - 12.3.2 Plan scope (knowledge, skills, attitudes) and sequence (ordering activities, opportunities for practice, feedback, and consultation)
 - 12.3.3 Plan instructional procedures including media and materials required
 - 12.3.4 Schedule events
 - 12.3.5 Prepare budget
 - 12.3.6 Prepare plan to evaluate the inservice

PURPOSE:

- 1. To enhance the reliability and validity of data collection/recording, analysis, and interpretation of the evaluation information selected, inservice training is required
- 2. To improve the fairness, objectivity and usefulness of the evaluation reports

INPUT:

- 1. Advice from specialist personnel (see, for example, workshop agenda which follows immediately)
- 2. Revised procedures
- 3. Terms of Reference from Task 2
- 4. Responsibilities and Procedures from Task 3
- 5. Committee's Overall Plan from Task 4
- 6. List of personnel assigned evaluation responsibilities
- 7. Evaluating and Improving Teaching Performance: An Inservice Kit, developed by L. Mireau
- 8. Evaluation Procedures: Annotated Bibliography and References, (Vol. III), particularly Section C - "Orienting and Training the Evaluator and Teachers" and "Audio-Visual Materials".

OUTPUT: A plan for implementing and evaluating the inservice programs

PERSONNEL: Planning Committee

Plus resource person(s)

GUIDING PRINCIPLES OR ASSUMPTIONS:

Since the data collection, analysis, and interpretation followed by report preparation is labor intensive, orientation and inservice is of fundamental importance. Inservice education should precede and supporting consultation should accompany all stages of the implementation of new policy.

**INITIAL TRAINING WORKSHOPS
FOR
DISTRICT ADMINISTRATORS, SCHOOL
ADMINISTRATORS, SUPERVISING TEACHERS
AND INTERNS INVOLVED IN THE
INITIATION TO TEACHING PROJECT**

OCTOBER, 1985

WORKSHOP PRESENTERS: Dr. Jon Thorlacius
Dr. Jim Twa
Dr. Richie Whitehead
Dr. David Townsend

**SPONSORED BY: Alberta Education
Planning Services Branch**

DAY ONE

- 9:00 - 9:15 Opening exercise--getting to know the group.
- 9:15 - 9:45 Overview of Essential Components of a Model of Teacher Evaluation (handout and overhead).
- 9:45 - 10:30 Small group activity: goal setting exercises.
- 10:30 - 10:45 COFFEE
- 10:45 - 11:15 Introduction to classroom observations:
1. Viewing of video clip
 2. Recording of observations
 3. Discussion of observations
- 11:15 - 12:00 Background information on classroom observations. FLANDERS explained (handout).
- 12:00 - 1:00 LUNCH
- 1:00 - 1:45 Introduction to ON-TASK SURVEYS:
1. View video clip
 2. Practice on-task observations
 3. Compare results
- 1:45 - 2:30 Introduction to TEACHER-STUDENT VERBAL INTERACTIONS:
1. View video clip
 2. Practice data collection
 3. Compare results
- 2:30 - 2:45 COFFEE
- 2:45 - 3:30 Attitude scale exercise--large group (handout).
- 3:30 - 4:00 Review of Day One activities. Sharing perceptions.

EXPLANATION OF ACTIVITIES DAY 1

- 9:15 - 9:45 The model of teacher evaluation is a comprehensive one showing the relationships between teacher evaluation and analysis of teaching, supervision, staff development, and the quality of instruction.
- 9:45 - 10:30 The goal setting exercise done in groups of four shows supervising teachers one way in which they may be able to work with interns in determining what constitutes effective teaching practice and how teaching performance can be evaluated over time.
- 10:45 - 11:15 This activity uses part of the coaching strategy in that participants are asked to assess and analyze their current level of skill in observing teaching.
- 11:15 - 12:00 The major handout that accompanies this session features 12 basic data collection instruments and describes their appropriate use.
- 1:00 - 1:45 Participants are introduced to the skills of on-task data collection. Consistent with the coaching model, they are given some essential theory, modelling and guided practice. Additional practice will be provided in Day 3.
- 1:45 - 2:30 Participants are introduced to three different ways in which they can collect information about teacher-student interactions. The video clip lasts approximately 10 minutes.
- 2:45 - 3:30 Individual and large group activity. The Coder Attitude Scale is used here to show participants the extent to which personal bias may influence classroom observations.

DAY TWO

- 9:00 - 9:45 Opening exercise. Communication skills. (Alter ego.)
- 9:45 - 10:30
1. Overview of the process of instructional supervision:
 - a) Assumptions (handout)
 - b) Premises (handout)
 - c) Diagrams (overhead)
 2. Short exercise in pairs. What happens in a pre-observation conference?
- 10:30 - 10:45 COFFEE
- 10:45 - 11:30 The Pre-Observation Conference (handout):
1. Review the questions
 2. View the video
 3. Discuss observations
- 11:30 - 12:00 Group activity: distinguishing among facts, inferences and judgments (handout).
- 12:00 - 1:00 LUNCH
- 1:00 - 1:45 Collecting objective information about teacher-student interactions (questions and answers; discussion):
1. Review and discuss observation sheets (handout)
 2. View video clip
 3. Compare observations
- 1:45 - 2:15 Role play: behavior description.
- 2:15 - 2:30 COFFEE
- 2:30 - 3:30 Small group exercise: defining an area of concern (handout).
- 3:30 - 4:00 Brainstorm session: The Elements of a Good Lesson (overhead).

EXPLANATION OF ACTIVITIES DAY 2

- 9:00 - 9:45 Communication skills are emphasized at all stages throughout the workshop. We will demonstrate (through practical example) how trust relationships can be developed and enhanced.
- 9:45 - 10:30 1. This series of handouts and overheads provides a definition of instructional supervision, a rationale for its use and evidence of its effectiveness.
2. The pairs exercise builds on developing communications skills and trust.
- 10:45 - 11:30 An actual pre-observation conference is modelled on a 10-minute videotape.
- 11:30 - 12:00 The purpose of this exercise is to increase the objectivity of classroom observations by making participants more aware of the distinctions between facts, inferences and judgements.
- 1:00 - 1:45 Additional aspects of teacher-student interactions are highlighted and the ways in which they are recorded are explained and practiced.
- 1:45 - 2:15 The role play features stereotypical behavior of teachers and administrators. The exercise involves all participants in the analysis of behavior.
- 2:30 - 3:30 In groups of four, participants complete several exercises that focus on the needs of the teacher who is being observed.
- 3:30 - 4:00 The stimulation for this session is a definition of "The Good Lesson" by a leading practitioner in the field of teaching effectiveness.

DAY THREE

- 9:00 - 9:45 Effective communication:
1. Input sessions
 - a) Communication skills (handout)
 - b) Freeing and binding responses (handout)
 2. Simulation: one-way/two-way communication
- 9:45 - 10:30 The post-observation conference:
1. Discuss the supervisor's role (handout)
 2. View the video clip
 3. Share observations
- 10:30 - 10:45 COFFEE
- 10:45 - 11:30 Trained and untrained supervisors: scripted video tape. Observe and discuss.
- 11:30 - 12:00 Classroom observations -- ANECDOTAL RECORD (handout);
1. View the video clip
 2. Record observations
 3. Discuss
- 12:00 - 1:00 LUNCH
- 1:00 - 2:45 ACTUAL CLASSROOM OBSERVATIONS. In small groups, participants visit selected classrooms and record the behavior of teachers and students using a variety of observation techniques.
- 2:45 - 3:45 Discussion of classroom observations.
- 3:45 - 4:30 Review and evaluation (handout).

EXPLANATION OF ACTIVITIES DAY 3

- 9:00 - 9:45
1. The aim of this session is to increase participants' awareness of the ways in which the quality of supervisor-supervisee interactions can be enhanced. The skills described here are modelled on three of the videotapes.
 2. This exercise provides conclusive evidence of the need for supervisors and teachers to possess and use a repertoire of communication skills.
- 9:45 - 10:30
- A post-observation conference is modelled on the 15-minute videotape.
- 10:45 - 11:30
- This videotape shows administrators and teachers demonstrating analysis and conferencing skills appropriate to different levels of training. Communication skills are highlighted.
- 11:30 - 12:00
- Participants will be given guided practice in the use of a data collection technique that has proven popular with supervisors and teachers.
- 1:00 - 2:45
- In each center arrangements will be made with local school administrators and teachers for small groups of participants to visit a selected number of classrooms to engage in actual practice of data collection techniques demonstrated during the workshop. Where possible, time will be provided for the pre-observation conference.
- 2:45 - 4:00
- The final session will focus on review and evaluation of the three-day workshop with particular emphasis on the experiences of participants in the actual classroom observations.

PLANNING WORKSHEET

TASK CATEGORY: 13.0 Develop Implementation Plan and Specify Resources Required

SPECIFIC TASKS:

- 13.1 Determine frequencies of evaluations of teaching performance for the following teachers: (a) probationary (new to the system), (b) tenured, (c) substitute, (d) temporary contract
- 13.2 Designate who may initiate evaluations in various circumstances
- 13.3 Identify who may serve as evaluators for those evaluations noted in 13.2
- 13.4 Delegate to schools and/or central office departments responsibilities for scheduling evaluations
- 13.5 Specify resources and support services required
- 13.6 Develop procedures consistent with the principles of natural justice and which provide an appeal mechanism.
- 13.7 Determine how records of evaluations are maintained, distributed and accessed
- 13.8 Develop provisions for systematic monitoring and evaluating of policy, guidelines, and procedures, e.g. participation, frequency and initiation

PURPOSE: To clarify specifics relative to implementation

INPUT:

1. Terms of Reference from Task 2
2. Responsibilities and Procedures from Task 3
3. Committee's Overall Plan from Task 4
4. Procedures planned for Task 11

OUTPUT: A draft implementation plan

PERSONNEL: Planning Committee

GUIDING PRINCIPLES OR ASSUMPTIONS:

To ensure successful implementation of new policies of teacher evaluation, school jurisdictions should be prepared to use all possible resources.

Teacher evaluation policies consistent with the principles of natural justice and which provide an appeal mechanism are required by Alberta Education.

PLANNING WORKSHEET

TASK CATEGORY: 14.0 Conduct Review of Inservice and Implementation Plans

SPECIFIC TASKS:

- 14.1 Elicit/solicit opinions of potential implementers and users
- 14.2 Solicit advice from resource personnel
- 14.3 Analyze and summarize 14.1 and 14.2
- 14.4 Make revisions

PURPOSE: To revise inservice and implementation plans to enhance clarity, applicability, and feasibility

INPUT:

- 1. Draft plans for inservice and implementation
- 2. Terms of Reference from Task 2
- 3. Responsibilities and Procedures from Task 3
- 4. Committee's Overall Plan from Task 4

OUTPUT:

- 1. Revised plan for inservice
- 2. Revised plan for implementation

PERSONNEL: Planning Committee
Resource Personnel
Potential evaluators and teachers providing feedback.

GUIDING PRINCIPLES OR ASSUMPTIONS:

At each relevant stage, the importance of involving teachers and administrators in the planning process cannot be overstated.

PLANNING WORKSHEET

TASK CATEGORY: 15.0 Conduct Inservice and Evaluate
Implementation Plan

SPECIFIC TASKS:

- 15.1 Implement the Inservice Program
- 15.2 Elicit/solicit opinions regarding Inservice Program
- 15.3 Elicit/solicit opinions regarding Implementation Plan
- 15.4 Decide to recommend acceptance or revision of the Inservice Program and Implementation Plan
- 15.5 Forward a copy of policy, guidelines, procedures, and plans to Regional Office of Education

PURPOSE:

1. To orient and train teachers and evaluators
2. To use the information acquired from inservice experience as a basis for recommending acceptance or revision of Inservice and/or Implementation Plans

INPUT:

1. Inservice Program (see 3-day inservice prototype developed by University of Lethbridge which follows Task 12)
2. Implementation Plan
3. Feedback from inservice participants

OUTPUT: Recommendation to accept Inservice Program and Implementation Plan

PERSONNEL: Planning Committee
Inservice participants

GUIDING PRINCIPLES OR ASSUMPTIONS:

Evaluation is a dynamic activity. It will change over time. There needs to be a continuing examination of the evaluation system and the degree to which its goals and objectives are being accomplished. Research suggests three to five years may be required to institutionalize major new policy.

PLANNING WORKSHEET

TASK CATEGORY: 16.0 Board Ratifies Inservice Program and Implementation Plan

SPECIFIC TASKS:

- 16.1 Presentation of recommendation with documentation to Board of Trustees
- 16.2 Board decides

PURPOSE: To establish district policy, guidelines, and procedures for teaching performance evaluation system and associated inservice.

INPUT: Recommendation and required documentation

OUTPUT: District policy, guidelines, and procedures for teaching performance evaluation system

PERSONNEL: Alternatives - Planning Committee
- Planning Committee Executive
Plus Central Office and Board of Trustees

GUIDING PRINCIPLES OR ASSUMPTIONS:

PLANNING WORKSHEET

TASK CATEGORY: 17.0 Implement Approved Teacher Evaluation Plan

SPECIFIC TASKS:

- 17.1 Provide evaluation staff and resources
- 17.2 Arrange at central office and schools for scheduling and evaluator assignments

PURPOSE: To provide leadership, co-ordination, communication and support required for successful implementation of the system

INPUT: District policy, guidelines, procedures and plans from Task 16

OUTPUT: "Hands-on" experience

PERSONNEL: Central Office
School administrators

GUIDING PRINCIPLES OR ASSUMPTIONS:

Research has demonstrated the importance of Central Office commitment and support for successful implementation of a system for evaluating teachers.

PLANNING WORKSHEET

TASK CATEGORY: 18.0 Monitor and Evaluate the Implementation of District's Policy, Guidelines, and Procedures

SPECIFIC TASKS:

- 18.1 Identify and select monitors and evaluators
- 18.2 Plan and implement procedures for collecting the necessary information (monitoring)
- 18.3 Plan and implement procedures for analyzing and interpreting the information (evaluating)
- 18.4 Plan and implement the reporting of conclusions and recommendations

PURPOSE: To provide a plan to secure information:

- 1. To ensure that the teacher performance evaluation system is appropriate and being implemented as intended
- 2. To provide for ongoing revising and updating of the policy, guidelines, and procedures

INPUT:

- 1. List of potential monitors and evaluators
- 2. Goals of Education, Goals of Schooling
- 3. Provincial policies and guidelines concerning teacher evaluation
- 4. Mission statements, policy statements, etc., regarding evaluation currently in place in the school district from Task 8
- 5. Terms of Reference from Task 2
- 6. Responsibilities and Procedures from Task 3
- 7. Sets of school system purposes from Task 8
- 8. Revised plan from Task 10

OUTPUT: A plan for use in preparing a monitoring/evaluating report on the teacher performance evaluation system with respect to, e.g., rationale, content, and provision for systematic reviews

PERSONNEL: Central Office
Designated monitors and evaluators

GUIDING PRINCIPLES OR ASSUMPTIONS:

Evaluation (Task 18.3) may be aided by comparing observations about actual implementation ("what is") with the intentions specified in the implementation plan ("what ought to be"). If the results are congruent then the plan was successfully implemented.

PLANNING WORKSHEET

TASK CATEGORY: 19.0 Follow-up Evaluations as Appropriate

SPECIFIC TASKS:

- 19.1 Appropriate decision-makers (including teachers) receive and consider evaluation reports
- 19.2 Plan appropriate follow-up needs at district and individual levels

PURPOSE: To provide evaluations to aid in decision-making at the organizational and individual level.

INPUT: Output matrix from Planning Worksheet from Task 8

OUTPUT: Plans for follow-up activities

PERSONNEL: Appropriate decision makers at both the organizational and individual levels

GUIDING PRINCIPLES OR ASSUMPTIONS:

Purposes for evaluation have not been achieved until follow-up action occurs.

Chapter 4

CRITERIA FOR USE IN EVALUATING TEACHING PERFORMANCE

The following nineteen criteria are those identified from empirically based research as being associated with effective teaching. These criteria indicate teaching behaviors and classroom conditions under the control of the teacher that have shown over a number of studies to be consistently related to pupil learning. These criteria are described on Chart 3.

Some of the research references cited as documentation to support the inclusion of each criteria are provided beside each behavior. This documentation is shown on Chart 4. Most of these reference are reviews of the research that considered the results of a number of studies. The majority of the studies cited in the reviews are correlational in nature, and direct cause-effect linkages between teaching and learning were not established from them.

To assist potential evaluators the Teacher Effectiveness: Annotated Bibliography and References, (Vol. II), includes some of these references but is further elaborated to include junior high and senior high school research studies and to cover additional subject areas. As well, inservice programs and instruments related to specific criteria have also been included.

The criteria are numbered to assist the reader in identifying an appropriate observation instrument (Vol. IV, Tables 1 and 2). As well, the Teacher Effectiveness: Annotated Bibliography and References, (Vol. II) which includes audio-visual materials is also organized according to the nineteen criteria for easier user reference.

Note that the nineteen criteria are not inclusive and that the labels utilized are particular to this report. Other researchers may use different nomenclature, may subsume some of the nineteen listed into other categories, or may expand the nineteen. Hence, the numbers will vary. Chart 5 illustrates this. The criteria listed here are matched with those used by L. Mireau in the Inservice Kit which complements this Manual.

Again it should be stressed that neither list can be considered "the definitive one". Additional linkages between student learning and other effective teaching behaviors are continually being established thus contributing new criteria to be considered in evaluating teaching performance. Secondly, as educational research methods become increasingly sophisticated, definitions, instruments and procedures for recording observations will become more refined. Existing categories should be considered "in transition."

Nor are the nineteen criteria intended to be utilized as an exhaustive checklist for evaluating teaching performance. The intent is solely to indicate to those responsible for developing or redesigning an evaluation plan those teaching behaviors which have been empirically shown to correlate with student achievement.

Cautions:

Much of the recent literature on teaching performance suggest several cautions that must be considered throughout the evaluation process.

1. One type of information should not be used as the sole source of data. Many researchers and administrators recommend, for example:
 - (a) observing a teacher in a variety of teaching situations -- different subject areas, grade levels, types of students, and instructional goals;
 - (b) recognizing the importance of contextual variables -- augmenting the objective record with a narrative or descriptive record; and
 - (c) using observational data in conjunction with other materials -- teacher's written plans, students' notes, etc.
2. The quality of evaluations is only as good as the reliability and validity of information collected. Observing and recording of teaching behaviors, for example, should be reliable and accurate.
3. There is broad consensus in the literature that the criteria selected by a district for evaluating teaching performance be congruent with the districts' overall goals and objectives.

Orienting and training administrators and teachers in evaluation methodology is assuming increasing importance. One section in Evaluation Procedures: Annotated Bibliography and References, (Vol. III), includes references and inservice materials which may be used to assist personnel in developing and maintaining the necessary evaluative skills.

As well, L. Mireau's Inservice Kit, Evaluating and Improving Teaching Performance, includes audiovisual materials which focus on training the observer to identify and record particular teaching behaviors. In addition, several tapes in this kit are directed at building conferencing skills.

Chart 3

Criteria Number	Criteria Name	Criteria Description
1.	Plans, Organization, and Implementation	Arrangements and procedures worked out in advance of instruction by the teacher and the extent to which these are appropriate and used.
2.	Academic Learning Time	The time a student is engaged with instructional materials or activities that allow a high level of success for that student.
3.	Teacher's Expectations	The appropriateness of the teacher's predictions of the individual's or group's achievements in a particular content area.
4.	Teacher's Awareness	Alertness to pupil behavior at all times; "withitness," having "eyes in the back of one's head" (Kounin, 1970).
5.	Concurrent Tasks Management	The efficiency and ease with which a teacher handles various classroom activities at the same time.
6.	Pace of Instruction	The rate at which learning experiences are provided for pupils by the teacher.
7.	Classroom Management	The teacher's facility to anticipate, prevent and deal satisfactorily with pupils' interpersonal and academic difficulties. Success in appropriately disciplining pupils.

Criteria Number	Criteria Name	Criteria Description
8.	Feedback to Pupils	Verbal and non-verbal responses to students.
9.	Time on Task	Engaged time; the time a student is attending to instruction in a particular content area.
10.	Enthusiasm	Teacher's display of eagerness and zeal.
11.	Clarity of Instruction	The communication of the teacher is such that the students are totally informed about what they should be doing, where to do it, and for how long, in order to ensure that students do not lose time because they are confused or because they are waiting for decisions to be made.
12.	Task Oriented/ Businesslike Orientation	The degree of academic focus and the teacher's directness in providing academically focussed instruction.
13.	Variability of Instruction	The appropriate use of variety in providing learning experiences for pupils.
14.	Flexibility	The ease with which the teacher adapts and adjusts satisfactorily to varying factors in the classroom setting.
15.	Understanding of Instructional Goals	The pupils' comprehension about what they should be doing, where to do it, and for how long.

Criteria Number	Criteria Name	Criteria Description
16.	Teacher Centred/Direct Instruction	"An instructional strategy where time spent on instruction is sufficient and continuous, content covered is extensive, goals are clear to students, materials are structured and sequential, questions are low level to produce many correct student responses, student progress is monitored, feedback is immediate and correct responses are reinforced. With direct instruction, the teacher sets the goals, plans the activities, chooses the material; questions are convergent, not divergent; interaction is structured, not authoritarian; tasks are cognitive oriented, not humanistic" (Ornstein, 1984: 343).
17.	Praise and Encouragement/Criticism	The appropriate use of positive (e.g., praise and encouragement) and negative (e.g., criticism) reinforcement methods.
18.	Individualization of Instruction	Teaching adapted to the background, ability, and needs of individual learners.
19.	Questioning Techniques	Matching the types of questions asked of the student to the characteristics of the student and to the instructional objectives.

Chart 4

Criteria Number	Criteria Name	Selected References
1.	Plans, Organization and Implementation	Brophy, 1982; MacKay, 1979; Berliner, 1979; Gage, 1978; Brophy, Evertson, 1976; Good, et al, 1975; Glass 1972.
2.	Academic Learning Time	Ornstein, Levine, 1981; Cookson, 1980; Huitt, Segars, 1980; Brophy, 1979; Berliner, 1979; Good, 1979; Medley, 1979; Noli, 1979; Peterson, 1979; Rosenshine, 1979; Good, et al, 1975; Bloom, 1974; Rosenshine, Furst, 1971.
3.	Teacher's Expectations	Good, Brophy, 1984; Proctor, 1984; Borko, et al, 1979; Brophy, 1979; Doyle, 1979; Winnie, Marx, 1979; Good, 1977; Rosenshine, 1976; Jeffer, 1973; Rosenthal, Jacobson, 1968.
4.	Teacher's Awareness	Good, Brophy, 1984; Brophy, 1979; Good, 1979; MacKay, 1979; Kounin, 1970.
5.	Concurrent Tasks Management	Good, Brophy, 1984; Denham, Michael, 1981; Brophy, 1979; Good, 1979; Kounin, 1970.
6.	Pace of Instruction	Good, Brophy, 1984; Piechowski, Colangelo, 1984; Salzer, 1984; Noonan, Wold, 1983; Huitt, Segars, 1980; Brophy, 1979; Good, 1979; Brophy, Evertson, 1973, 1976; Good, et al, 1975.
7.	Classroom Management	Curwin, Mendler, 1984; Bechtol, Anderson, 1981; Project T.E.A.C.H, 1979; Borko, et al, 1979; Doyle, 1979; Gage, 1978; Dunkin, Biddle, 1974; Kounin, 1970.

Criteria Number	Criteria Name	Selected References
8.	Feedback to Pupils	Brophy, Good, 1984; Anderson, Evertson, Emmer, 1980; Brophy, 1979; Peterson, 1979; Good, Grouws, 1977; Brophy, Evertson, 1976; Rosenshine, 1976.
9.	Time-on-Task	Strother, 1984; Anania, 1983; Bloom, 1980; Cookson, 1980; Berliner, 1979; Peterson, 1979; MacKay, 1979; Good, Grouws, 1977; Medley, 1977; Rosenshine, 1976; Tikunoff, 1975; Bloom, 1974.
10.	Enthusiasm	Good, Brophy, 1984; Brophy, 1979; Good et al, 1975, 1979; Rosenshine, Furst, 1971; Rosenshine, Hamachek, 1969.
11.	Clarity of Instruction	Smith, Smith, Staples, 1982; Smith, Land, 1981; Brophy, 1979, 1981; Cruickshank, 1979; MacKay, 1979; Peterson, 1979; Good, Grouws, 1977; Brophy, Evertson, 1976; Rosenshine, Furst, 1971.
12.	Task Oriented/ Businesslike Orientation	Brophy, Good, 1985; Larson, 1984; Ornstein, Levine, 1981; Cookson, 1980; Brophy, 1979; MacKay, 1979; Medley, 1979; Noli, 1979; Peterson 1979; Good, Grouws, 1977; Boak, Conklin, 1975; Glass, 1972; Rosenshine, Furst, 1971.
13.	Variability of Instruction	Bailey, 1984; Brophy, 1979, 1981; Good, 1979, 1981; Good, et al, 1975; Rosenshine, Furst 1971.
14.	Flexibility	Brophy, Good, 1985; Martin, 1979; Good, Grouws, 1977; Block, 1971; Rosenshine, Furst, 1971; Flanders, 1970; Soar, 1968.

Criteria Number	Criteria Name	Selected References
15.	Understanding of Instructional Goals	Brophy 1973; Good, Brophy, 1985; Peterson, 1979; Brophy, Evertson, 1976; Good, et al, 1975; Good, Kounin, 1970.
16.	Teacher Centred/ Direct Instruction	Gersten, Carnine, 1984; Meyer, 1984; Cicchelli, 1983; Ornstein, 1981, 1983; Brophy, 1979; Fedigan, 1978; Medley, 1977, 1979; Peterson, 1979; Rosenshine, 1979; Brophy, Evertson, 1973, 1976; MacDonald, 1976; Stallings, Kaskowitz, 1975; Soar, 1973; Bereiter, Englemann, 1966.
17.	Praise and Encouragement/Criticism	Roscoe, Peterson, 1982; Medley, 1979; Fedigan, 1978; Anderson, Brophy, 1976; Brophy, Evertson, 1976; Rosenshine, Furst, 1971; Lembo, 1969; Flanders, 1965.
18.	Individualization of Instruction	Slavin, 1984; Huitt, Segars, 1980; Peterson, 1979; MacDonald, 1976; Rosenshine, 1976; Dunkin, Biddle, 1974; Good, Brophy, 1973; Block, 1971.
19.	Questioning Techniques	Sloan, Toews, 1984; Blosser, 1983; Cookson, 1980; Medley, 1979; Peterson, 1979; Fedigan, 1978; Rosenshine, 1976; Brophy, Evertson, 1976; Rosenshine, Furst, 1971; Bereiter, Englemann, 1966; Flanders, 1965.

Chart 5

Inservice Kit: Dr. L. Mireau

Criteria Number	Criteria Name	Module No.	Behavior No.	Criteria
1.	Plans, Organization and Implementation	2	1:	Rules and Routines
		3	3:	Minimize Direction Giving
		3	2:	Optimize Academic Learning Time
		3	1:	Planning
2.	Academic Learning Time	3	3:	Minimize Direction Giving
		3	2:	Optimize Academic Learning Time
		5	7:	Momentum
3.	Teacher's Expectations	2	1:	Rules and Routines
		3	4:	Teacher Clarity
		4	1:	Selection of Students
4.	Teacher's Awareness	2	2:	Withitness, Awareness
		2	6:	Circulating, Monitoring
		5	3:	Withitness
5.	Concurrent Tasks Management	2	3:	Low Key Responses
		2	6:	Circulating, Monitoring
		5	2:	Overlappingness
6.	Pace	3	2:	Worthwhile Seatwork
		3	7:	Variety
		5	7:	Momentum
7.	Classroom Management	2	3:	Low Key Responses
		2	4:	Nip in Bud
		2	5:	Nab Culprit
		2	6:	Circulating, Monitoring
		5	2:	Overlappingness
		5	5:	Warmth

Inservice Kit: Dr. L. Mireau

Criteria Number	Criteria Name	Module No.	Behavior No.	Criteria
8.	Feedback	2 2 4 5	3: 6: 2: 5:	Low Key Responses Circulating, Monitoring Sustaining Responses Warmth
9.	Time-on-Task	2 3 3 3 5	6: 2: 2: 2: 4:	Circulating, Monitoring Worthwhile Seatwork Optimize Academic Learning Time Standard Signal Smoothness
10.	Enthusiasm	5	8:	Persuasiveness
11.	Clarity of Instruction	3 3 5 5 5	2: 4: 1: 4: 8:	Standard Signal Teacher Clarity Clarity Smoothness Persuasiveness
12.	Task Oriented/ Businesslike Orientation	2 3 3 5	1: 3: 2: 7:	Rules and Routines Minimize Direction Giving Standard Signal Momentum
13.	Variability of Instruction	3	7:	Variety
14.	Flexibility	3 4 5 5	7: 3: 7: 8:	Variety High and Low Order Questions Momentum Persuasiveness

Inservice Kit: Dr. L. Mireau

Criteria Number	Criteria Name	Module No.	Behavior No.	Criteria
15.	Understanding of Instructional Goals	3 3 5	4: 7: 8:	Teacher Clarity Variety Persuasiveness
16.	Teacher Centred/ Direct Instruction	2 3	1: 6:	Rules and Routines Large Group Instruction
17.	Praise and Encouragement/Criticism	2 4 4 4 5 5	6: 2: 4: 5: 5: 6:	Circulating, Monitoring Sustaining Responses Use of Praise Use of Criticism Warmth Empathy
18.	Individualization of Instruction	2 3 4 4 4	6: 2: 3: 4: 5:	Circulating, Monitoring Worthwhile Seatwork High and Low Order Questions Use of Praise Use of Criticism
19.	Questioning Techniques	4 4 4	1: 2: 3:	Selection of Students Sustaining Responses High and Low Order Questions

Chapter 5

UNDERSTANDING OBSERVATION METHODS

Collecting Data

Various types of information gathered from several sources may be employed to ensure that the evaluation of teacher performance is as precise as possible. Three major considerations must be taken into account when organizing systematic observations of teaching behaviors and classroom transactions.

- o The most reliable information is gathered by use of low-inference instruments and low-inference methods.
- o The evaluation procedures and the specific teaching behaviors and classroom transactions selected for attention may vary according to the needs and desires of each school. As well, each teacher-evaluator pair may jointly decide on focus and procedure.
- o Observers must be aware of the possible effects of an outsider's presence on the behavior of the teacher as well as the performance of the students, and that these alterations in behavior may reduce the validity of the measurement of performance.

Types of Instruments

Instrument selection is an important part of the supervision procedure and each type of instrument has advantages and disadvantages that should be considered. According to Harris, Bessent and McIntyre (1978), four observation instrument types exist:

- A. Rating scales
- B. Frequency tabulation
- C. Checklists
- D. Free - response, narrative, or anecdotal statements

Some instruments are a combination of the above.

A. Rating Scales

In the past, rating scales were the most high-inference, yet the most widely used instrument type. Scores from such instruments were often unreliable because of recorder bias, ambiguous definitions of activities and the inclusion of ratings on unobservable events such as "daily preparation" and "teacher knowledge".

However, a well developed, low-inference rating scale can be a valuable tool in the supervision process and has the following characteristics:

- clearly defined sets of observable behaviors
- numerical values for differentiating observable events on a continuum of quality or quantity

- a single scale for each category of events
- and ideally, an indication of a standard on the scale.

The following example describes a rating scale that would offer precise information:

Example 1:

1. Did the teacher state the lesson objective?

Did not state the objective	Only implied the character of the objective	Stated the objective, not very clearly	Stated the objective, clearly
--------------------------------	---	---	----------------------------------

Each rating on the above scale is defined according to an **observable behavior**. Recorder inference is minimal due to the fact that he is asked to circle the number of the corresponding behavior that he actually observed. The term 'clearly' should be well defined by the observer and teacher before use of this instrument. In this example, the probable acceptable standards would be "stated objective clearly". Combining the results from this rating scale with other instruments, such as free-response or anecdotal statements, will increase reliability.

Example 2 is a high-inference method of evaluation using a rating scale. The ambiguity lies in the term "classroom management" and how the recorder perceives and judges the behavior of the teacher.

Example 2:

The classroom management techniques used by the teacher were:

Adequate					Inadequate
1	2	3	4		5

In the last example of a rating scale the more global characteristic "classroom management" is described and placed in four categories:

Example 3:

	Strongly Agree				Strongly Disagree
a) The teacher was well organized.	5	4	3	2	1
b) The teacher paced the lesson to meet individual student needs.	5	4	3	2	1
c) The teacher maintained a high level of student attending behavior	5	4	3	2	1
d) The teacher used a variety of questioning techniques.	5	4	3	2	1

Because there is less ambiguity concerning the term "classroom management" the above rating scale is less of a high-inference instrument than example 2. As well, the information recorded may alert both the teacher and supervisor to possible staff development activities in any of the categories. Low-inference instruments which utilize a small unit of observation e.g. one behavior or technique could serve to initiate such activities.

B. Frequency Tabulations

Frequency tabulation instruments are used for recording the occurrence of an event over time or to count the number of units of a particular category of events. The observer may record on a time-interval basis using an instrument containing well defined categories of behaviors. For example, teacher activities such as, "takes attendance", "asks questions", "clarifies answer," "moves around student desks", may be coded every 15 seconds; or the observer may scan the students' behavior in a well defined pattern every five minutes, recording a number of attentive/inattentive behaviors.

The next example taken from Strategies of Effective Teaching (Orme, 1978) illustrates a simple coding sheet to help analyze one aspect of classroom interaction on which the observer can record frequencies of each response as it occurs during teaching:

Example 4:

Teacher Question	Student Response	Teacher Reinforcement	Probe Nonprobe
(tally)	(tally)	(o, +, -)	(tally)

More detail can be easily added. The column on teacher reinforcement may be extended to record various types of teacher behavior, verbal and nonverbal; for example, ignore (o), reinforce (+), and punish (-). When probes occur, indicate with a check in column four. Nonprobes can be recorded with an X. A column five could be added to include type of probe: redirect, refocus, prompt, clarification, critical awareness relation, or prediction. Information collected employing frequency tabulations will offer a reasonably accurate sample of specific classroom activities.

Often this type of instrument is used to record student on-task behavior. Within a specified time period and at specified time intervals the observer could record one student, a random sample of students, or the entire class.

Example 5:

Time Intervals	1	2	3	4	5
Student					
A					
B					
C					

Code: On-Task - OT
 Talking - T
 Out of Seat - OS
 Non-Productive Activity - NP

C. Checklists

Checklist instruments may include many categories of events wherein the presence of a behavior is recorded. A checkmark beside an event such as 'teacher greeted students at the door' indicates the fact that students were greeted, and not the quality of that teacher's behavior. This recording results in a survey of the presence or absence of certain classroom behaviors as indicated by the instrument domain. Checklists have the potential of being low-inference measurements of behavior because the observer may make a mark or state a time when a specific, observable teaching behavior takes place. The example below, however, is more holistic and more subjective.

Example 6:

Yes

No

1. Has knowledge of subject matter
 2. Shows evidence of long-range planning
 3. Presents lessons clearly
 4. Monitors students' involvement and response
 5. Is a good model
-

D. Free-response, Narrative, and Anecdotal Statements

Free-response instruments attempt to record all the teaching domains: classroom, teacher, pupils, and lesson. The observer describes in brief narrative form any observed event that relates to a well defined category. The result is a holistic view of a total classroom situation. Example 7 illustrates this type of instrument.

Example 7:

Please comment on the following:

1. Planning and Preparation: _____

2. Classroom Control: _____

3. Curriculum: _____

Example 7 can be a highly subjective instrument. The evaluator records the observations of the classroom situation using a fairly unstructured format, and the results depend largely on the perception of the evaluator and whether judgements are included in these comments. The behaviors that make up each aspect of classroom operation are not specified. Instead, the evaluator is expected to recall behaviors which are selected in idiosyncratic fashion, apply criteria that are unique to the observer, and record generalized impressions.

Narrative and anecdotal statements may be low- or high-inference recordings depending upon an evaluator's comments. For example, a verbatim record of classroom discourse is low-inference. As well, **descriptive** anecdotal statements are low-inference measurements of teaching behaviors. As in an ethnographic study, the observer is listing exact, observable teaching behaviors and the times at which they occurred. An illustration follows.

Example 8:

9:00 - 9:00

Teacher at door. Spoke to each child as they entered classroom.

9:10 - 9:15

Teacher delivered verbal instructions to the students. Students silent.

In contrast to example 8, the following is an example of anecdotal statements which is a high-inference measurement:

Example 9:

9:00 - 9:10

Teacher greeted children warmly at the door and took a positive interest in each child.

9:10 - 9:15

The teacher appeared warm and convivial as a thorough set of instructions was presented to the class. The students were eager to learn and listened attentively.

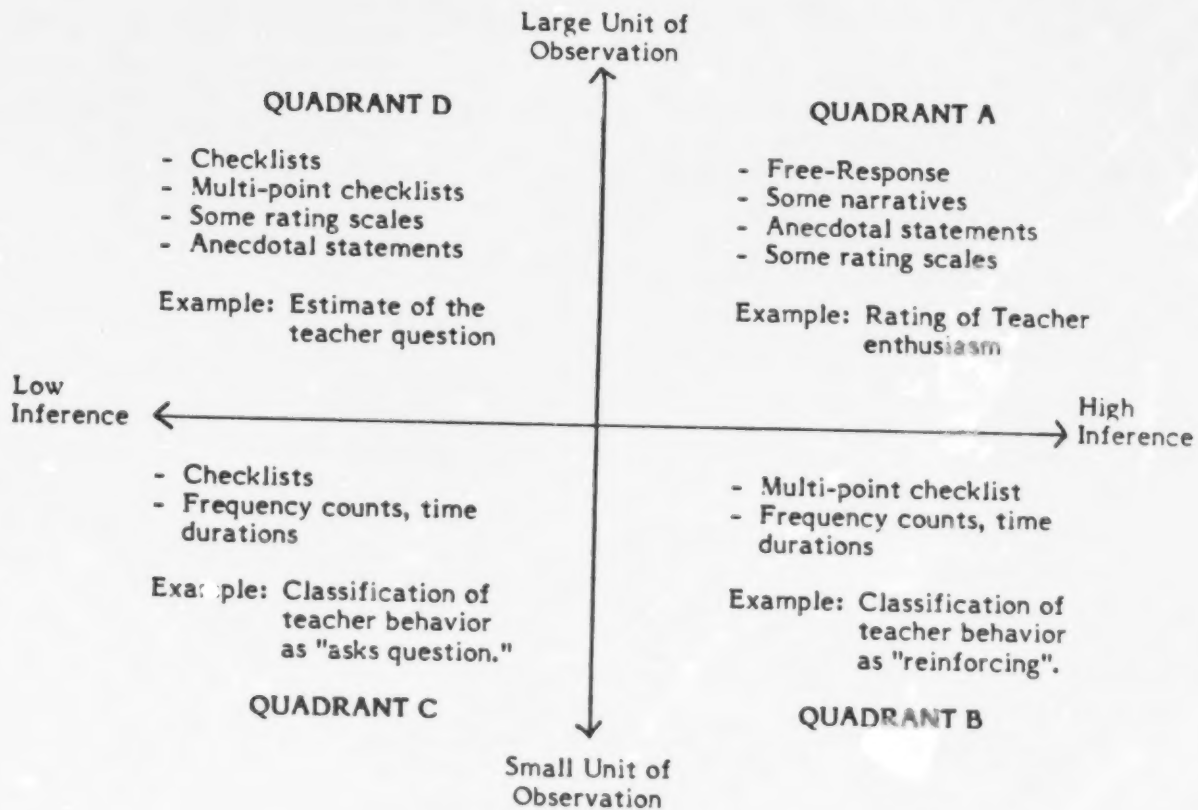
The above illustrates **judgemental** anecdotal statements which is a high-inference measurement because a teaching behavior is inferred according to the beliefs of the observer. Value terms such as "warm" and "convivial" indicate a judgement is being made.

Classification of Observation Procedures

Data collecting procedures depend upon the **Unit of Observation** and observer/instrument **Inference Level**. Information gathering methods can be placed on a two-dimensional graph as indicated in Figure 2, p. 69. The horizontal axis is related to inference level, either low or high; and the vertical axis indicates the unit of observation, either large or small. The focus of the observation will determine the inference level and the observational unit.

Figure 2

CLASSIFICATION OF OBSERVATION PROCEDURES



Large unit of observation: examples - total class time, all students, many classroom behaviors.
Small unit of observation: examples - time - interval of 3 seconds, few classroom behaviors, few students.

High Inference: observer judgements on behavior recorded.
Low Inference: observed behaviors recorded.

Adapted from: Texas Junior High School Study: Final Report of Process - Outcome Relationships, Classroom Observation Scales, Appendix B. The University of Texas, Austin Texas: Research and Development Center for Teacher Education, 1978, p. 9.

Referring to Figure 2: Classification of Observation Procedures:

Unit of observation relates to a) the number of teaching behaviors to be observed, b) the number of students or student behaviors to be observed, and c) the duration of time between recording events.

Inference level relates to the degree of observer judgement about the teaching performance. A low-inference procedure will result in information about teaching behaviors only; no judgement or opinions of the observer will be recorded. Alternately, high-inference procedures include observer judgements about the quality, the appropriateness or the adequacy of teaching and student behaviors.

All data collecting procedures can be placed within Figure 2. Advantages and disadvantages exist with methods found in each of the four quadrants. Types of instruments for recording effective teaching can be placed in more than one quadrant because (a) the axes are continuous and (b) the categories of behaviors being measured may vary from instrument to instrument.

Quadrant A relates to information gathering procedures that are high-inference and includes large observation units. Because no specialized coding system exists, the training time is minimal and any classroom behavior can be recorded. Narratives and anecdotal statements, free-response descriptions, and some rating scales pertain to quadrant A. Observation procedures selected from quadrant A can provide a summary judgement based on one observation occasion.

Quadrant B information also involves relatively high-inference levels, but unlike quadrant A, small units are observed. These specific units of observation could include three or four teacher behaviors only; or teacher behaviors every five minutes, etc. Frequency counts, time durations, rating scales and multi-point checklists are instruments of this category. The observer makes a decision about classroom events as they occur, using a precise scale, and is not asked to summarize all behaviors on one occasion. Training of observers regarding the definitions is usually necessary. A limited number of dimensions can be measured; therefore, as with all data collecting methods, it is desirable to combine data gathered employing quadrant B procedures with other information.

Data collected employing **Quadrant C** methods involve little or no inference and small units of observation. Behavior is classified during short durations of time or after single events, and no interpretation is required of the observer. Instruments pertaining to quadrant C include some frequency counts and duration to time instruments, as well as checklists. Although the information gathered employing this method is reasonably precise, only a small number of potential classroom dimensions are measured. A drawback of selecting quadrant C methods for information gathering is the fact that observers usually require training to learn the specific definitions of categories being measured and the coding system.

Quadrant D procedures, like quadrant A methods of collecting data, involve a large observation unit, require minimal observer training time, and record information about a variety of classroom settings and teaching conditions. Like quadrant C, the data gathered is low-inference. Checklists and multi-point checklists are characteristic of this method. An elaborate coding process does not exist but the recorder must learn the definitions for the behaviors and the various scale points. Multi-point checklists

are particularly useful because the data collected is precise yet these instruments offer the potential for flexibility and adaptability to a variety of classroom concerns.

Collecting accurate data about teaching performance is a major procedure in the total supervision process. To establish a complete performance profile, information could be gathered employing methods outlined in all four of the quadrants from Figure 2. The more information collected, from as many sources as possible, the more precise, thorough, and accurate a teaching performance profile will be.

Developing and Adapting Observation Instruments

Medley, et al (1984: 114-115) view three levels of hierarchically related levels of teacher competence. The lowest level is that of a teaching **skill**: a teacher functioning at this level is competent to execute a lesson plan. The second level of teacher competence is the ability to develop a lesson plan and the third level has to do with defining objectives (appropriate to the class and the goals set for the school in the community). The authors recommend that measurement based teacher evaluation should not be applied to competencies at the second level until it has been successfully used to evaluate competencies on the first. The authors are emphatic that the process of performance evaluation be performed with a high degree of objectivity and in four distinct steps: defining the task; obtaining the record; scoring the record; and evaluating the scores. Such objectivity, they argue, will allow comparisons of different teachers to be made. Such an objective system of evaluation requires training of potential evaluators.

Systematic observation requires a direct focus. "Defining the task" provides such a focus. Summaries of Instruments for Use in Evaluating Teaching Performance, Vol. IV, will provide guidance in selecting criteria and using or adapting descriptors. The reader is also directed to L. Mireau's Inservice Kit, Evaluating and Improving Teaching Performance, which complements this Manual.

A primary focus of M. Orme's Strategies of Effective Teaching (1978) is classroom interaction, specifically questioning techniques and probing (a teaching strategy which has been shown to lead to reflective thinking in students). To systematically observe this behavior, Orme utilizes a frequency recording form which has been referred to previously (see p. 65). Strategies of Effective Teaching is a series of eight 30 minute programs and one 60-minute program for in-service and preservice teacher training (refer to Vol. III for an annotation of this series). However, Program 4: Questioning Techniques and Probing, Program 7: Applied Observation and Analysis Skills, and Program 9: Demonstration Lessons, could easily provide an Inservice Kit to orient administrators and teachers in identifying and recording these specific teacher behaviors. As well, some guidance is provided in progressing from a simple recording format to others of increasing complexity.

A direct focus for much of R. Manatt's materials is M. Hunter's "Seven Steps to Lesson Design". These are: anticipatory set, objective, input, modeling, check for understanding, guided practice, and independent practice. Manatt suggests "closure" for step eight. Two observation instruments to which Manatt often refers are "timeline format" and "topical data capture". Both are narrative instruments which employ a standard - a particular lesson design and teacher presentation - and judgements may be applied to evaluate how well the teacher adhered to the standard. The "timeline

format" (Sample 1) and the "topical data capture" (Sample 2) are presented at the end of this chapter.

Depending on the direct focus, a seating plan (Samples 3 and 4) may be used in a variety of ways. For example:

- o plot teacher movement during lesson(s). This may reveal that a teacher is unintentionally restricting movement to "front half" of classroom.
- o record attention accorded individual students by teacher. Depending on the coding system employed by the recorder, this format may range from simple to complex.
- o record verbal and nonverbal interaction between students and teacher. By calculating the percentage of interactions accorded male and female students, this recorded data may reveal a teacher unintentionally "favouring" male or female students. Again, if the kind of teacher response is coded (for example, ignore, punish, reinforce), more information is available.
- o time-on-task. Again, depending on the coding system, the unit of observation and the time interval, this may be a simple or complex instrument for measuring student behavior. From the data collected the percentage of time of student(s) on-task may be calculated.

The chief advantage of all of the above examples which employ a seating plan is that the data collected is objective - - no inference or judgement is made by the observer. In addition, teachers generally find the information "non-threatening" and of immediate use, and observers require little if any training.

CONCLUSIONS		NARRATIVE	CONFERENCE QUESTIONS
	<u>Time</u>		What, When, Why, How?
RECAP	RECAP	RECAP	PLANS
<u>Strengths</u>	TOTAL:	(1) One thing to reinforce	Techniques I will use:
<u>Things To Change</u>	ENGAGED	(2) One behavioral objective for change	Techniques I will use:

Sample 2

Teacher _____

Date _____

Observer _____

TOPICAL DATA CAPTURE

(1) Anticipatory Set

(2) Objectives

(3) Input

Wonder About?

[illegible]

Sample 4

Engagement Rate Observation Form

Teacher's Name _____ Date _____
Observer's Name _____ Time Begin: _____
End: _____

Sweep	Time	Activity	Sweep	Time	Activity
1.	—	—	6.	—	—
2.	—	—	7.	—	—
3.	—	—	8.	—	—
4.	—	—	9.	—	—
5.	—	—	10.	—	—

(Front of Room)

CHAPTER 6

POST OBSERVATION ACTIVITIES

Analysis and Interpretation

Data gathered from selected observation methods should be interpreted jointly by the supervisor and teacher, and judgements regarding teaching performance made according to predetermined standards.

Standards upon which a performance is judged may be determined before the evaluation in the following ways.

- o The observation instrument utilized indicates acceptable standards.
- o The teacher and the evaluator may jointly agree upon standards that are based on what may be typical and/or realistic when the objectives for the lesson and conditions in the classroom are considered.
- o The evaluator determines the performance standard based on his/her knowledge of similar circumstances elsewhere.
- o The teacher determines personal performance standards dependent upon expectations, subject matter, and lesson objectives.

An evaluator may initiate supervision with a holistic or global measurement to indicate effective and less effective teaching areas. This overview could direct further developmental supervision which would employ more specific methods of data gathering focused on precise teacher behaviors. For example, results from a narrative instrument may indicate that the teacher is ineffective in the broad category of "questioning techniques." A low-inference, small unit instrument, such as a questioning checklist, may be employed to focus on specific questioning types and strategies. The skill recorded on a specific instrument may produce a very clear picture of precise teaching behaviors.

Analysis of data from each of the four types of observation procedures may take the following forms:

- A. Rating scales may indicate whether a behavior has occurred and the quality or quantity of that behavior. Some of these instruments offer a summary of a total lesson. The events in each category must be analysed according to the lesson objectives and classroom conditions. A study of scores in each category will indicate effective or less effective teaching behaviors. The subjectivity of the data from rating scales must be thoroughly examined (Medley, et al, 1983).
- B. Frequency tabulation instruments offer information on specific classroom events. Depending upon the focus, these instruments will:
 - indicate specific teacher or student activities at timed intervals throughout a lesson, or

- indicate the number of times a teacher or student behavior occurs during a lesson.

An instrument that asks the recorder to code "teacher questioning techniques" will inform as to:

- the types of questions the teacher asked (direct, complex, open-ended, choice, etc)
- the types of teacher response (probe, nonprobe)
- whether students were called upon to respond before the question, during the question, or after the question
- whether pauses were used after questions were asked.

The supervisor and teacher could then analyze the data according to the appropriateness of the questioning techniques in relation to the lesson objectives and classroom characteristics. The resulting data give precise information about certain specified activities.

- C. Checklists are usually holistic and offer an overview of many classroom activities. The quality of behaviors is not indicated, just the presence or absence of events. Whether a lesson would have been enhanced by the addition of an activity that was absent depends upon the initial standards determined by the evaluator and evaluatee, and by the objectives of the lesson.
- D. Free-response instruments, narratives, and anecdotal statements also may offer holistic information about classroom activities. Free-response instruments and some narratives call upon the observer to respond to questions asked for observed events that relate to any given category. The resulting information is a summary of a class in descriptive form. Use of these instruments will facilitate communicating information regarding broad categories of classroom events and may lead to the use of more specific instruments that focus on one or two performance areas.

One instrument or method of gathering data will not suffice in offering a total, precise and objective account of teaching performance. However, the analysis and interpretation of information collected from numerous sources and by many methods may result in a **teaching performance profile** that is not only accurate, but **thorough**. Interpretation is most successful if completed jointly by the evaluator and teacher based on the data gathered and the resulting profile.

Data collected using low-inference instruments with trained observers is the most credible and, therefore, should be incorporated in a teaching profile to a greater degree than information gathered employing extremely high-inference measurements.

Conferencing

The teaching performance evaluation should not terminate after analysis and interpretation. The profile developed and the judgements made should be communicated to the teacher in a post-observation conference. The climate of this conference and form it takes are important to the success of this follow-up activity.

An evaluation of teaching performance may result in many activities for the appraisee. A well planned conference recognizes the fact that the teacher is a professional and the psychological as well as the technical aspects of a conference are a consideration. The supportive evaluator will maintain a warm, convivial atmosphere throughout the conference. A conference should include praise as well as criticism. The most helpful conference provides a balance between teaching performance weaknesses and strengths. The evaluator should be willing to listen to feedback and accept the teacher's ideas and opinions.

According to Sweeney (1984) the successful, well planned conference will have the following characteristics:

A climate that is relaxed and supportive.

An introduction that clearly states the purpose of the conference and explains the conference structure.

A coaching/counselling section that clearly presents data and describes observations, focuses on important, modifiable items, discusses alternative behaviors, and checks for understanding.

An identification of goals that are attainable by the teacher over a period of time.

A closure that summarizes the main points of the conference and indicates a schedule for follow-up.

For further assistance concerning conferencing the reader is directed to Evaluation Procedures: Annotated Bibliography and References, (Vol. III) and L. Mireau's Inservice Kit, Evaluating and Improving Teaching Performance, which includes several videotapes on building conferencing skills.

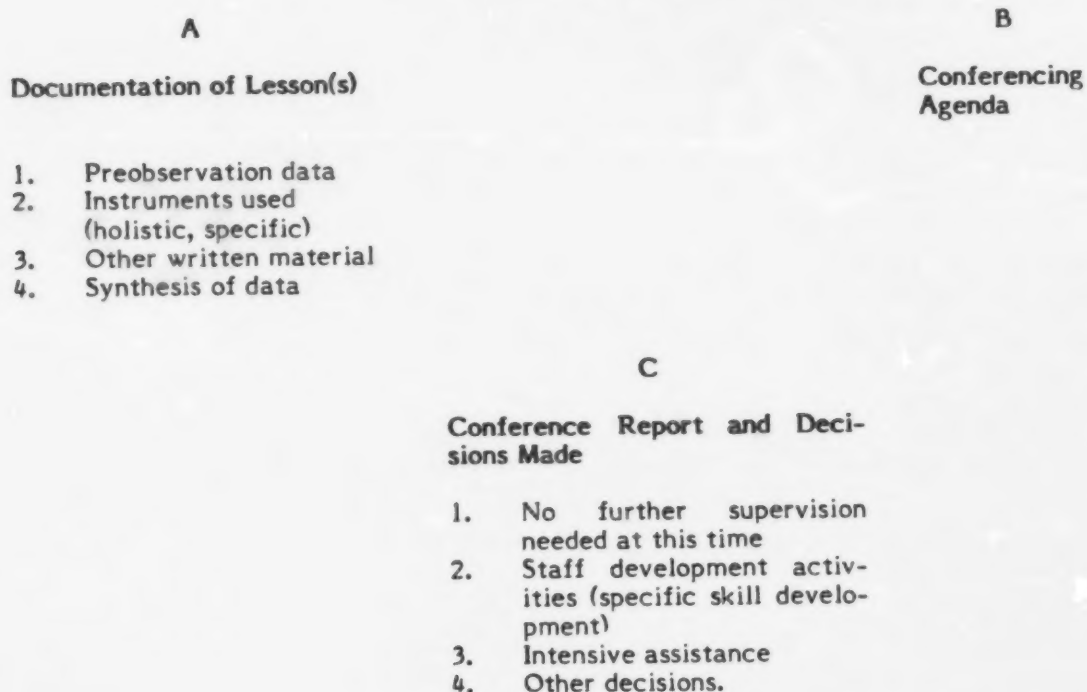
Record Keeping

Record keeping refers to the filing of any information pertinent to the performance evaluation of a teacher. These materials could be in the form of written reports, memos, lesson plans, observation instruments, letters, audio-visual data and conference agendas. The method of record keeping and the determination of access to information should be included in the district evaluation plan.

The evaluation process is cyclic and record keeping on the part of the evaluator would follow that pattern, as illustrated in Figure 3. The decisions made at the conferencing stage will determine whether the cycle will be repeated or terminated. Yet the evaluation cycle is never fully terminated other than in the sense of having established an acceptable level of teaching performance. Rather, the evaluation process may become an integral component of staff development activities building toward more effective programs and more effective schools.

Figure 3

RECORD KEEPING CYCLE



The Record Keeping Cycle

- A. Documentation of Lesson(s).** The instrument(s) used while observing a lesson, the lesson plan, as well as the analysis and resulting performance profile could be included in the teacher's file. Lesson observation documentation is the basis for the remaining two steps of the cycle. Therefore, the information gathered and the data analysis should be as complete and accurate as possible.
- B. Conferencing Agenda.** A conference should be well planned as stated in the conferencing section of the manual. An agenda indicating each area to be addressed could also be included in the appraisee's file.
- C. Conference Report and Decisions Made.** Du Vall (1983) advises that "there is probably no 'right' way to report information collected in the evaluation of teaching" (38). The most appropriate method of report writing, continues Dr Vall, is dictated by the way the information will be of best use to the people who

will make a decision based on the evaluation. However, evaluation reports have some similar characteristics. The report at the end of the conference which may be included in the teacher's file should be **brief, direct**, and contain **only relevant information**. The report can be in the following formats:

- a memo upon which the evaluator briefly summarizes the evaluation process and decisions made.
- a standardized form could be developed to assist the evaluator in summarizing the evaluation.

A conference report, in either a memo or a standardized form, may contain all, or a portion of the following information*:

-
- Name of teacher, evaluator
 - Dates of the observation, conference
 - Performance area
 - Purpose of the evaluation
 - Procedures of the evaluation
 - Documentation/appraisal method(s)
 - lesson plan
 - instrument(s) employed
 - method of data analysis
 - standard(s)
 - Evaluator's comments
 - recommendations
 - decisions made
 - Evaluatee's comments
 - A schedule of further evaluation activities
 - Signature of evaluator and teacher

*Adapted From: Manatt, Richard P. Supervising the Marginal Teacher, Instructional Materials Booklet, Research Institute for Studies in Education, Iowa State University, Iowa, 1984, pp. 28, 29.

The reader is reminded that L. Mireau's Inservice Kit contains a section on the writing of reports. As well, the reader is directed to Evaluation Procedures: Annotated Bibliography and References, (Vol. III), particularly the section entitled "Planning for an Evaluation of Teaching Performance" and "Follow-up, 3. Report Writing".

The Marginal Teacher

Under normal circumstances, the decision made at the end of the conference is that the teacher is performing effectively. Therefore, the cycle could be terminated until the regular supervision schedule, as decided upon by the jurisdiction and school, begins again.

However, in some cases the teacher's performance will have been assessed as marginal and the decision may then be to either terminate employment or offer intensive assistance. The teacher and evaluator could decide jointly as to the nature of the assistance.

Therefore, in addition to the information outlined above, the report for the marginal teacher may include:

- o a schedule of future observations
- o names of other evaluators who could become involved in this process
- o inservice activities outside the school
- o any assistance forthcoming from within the school.

After the marginal teacher has been allowed time to improve performance and/or received assistance, the observation/record keeping cycle will begin again. **It is imperative that the evaluator continue keeping thorough records as outlined in the cycle for every performance observation for the marginal teacher.** The cycle should continue until such time as performance meets set standards or termination of employment is necessary. Such procedures will be consistent with the principles of natural justice and provide an appeal mechanism.

Once the marginal teacher has acquired the goals of the intensive supervision, a final report indicating such and summarizing the procedures should be added to the file. The teacher may then be placed on the regular supervision schedule with or without continuous monitoring by and communication with the supervisor.

A marginal teacher who does not meet the set standards after intensive assistance and a predetermined period of time, may be released from employment. A report thoroughly outlining the procedures taken in the supervisory process should be placed in the file that already contains the documentation supporting the decision to terminate.

References

TEACHER EFFECTIVENESS

- Abrami, P. C., Perry, R. P., and Leventhall, L. The relationship between student personality characteristics, teacher ratings and student achievement. Journal of Educational Psychology, 74(1), 1982.
- Abrami, P. C., et al. Do teacher standards for assigning grades affect student evaluations of instruction? Journal of Educational Psychology, 72(1), February 1980.
- Abrams, J. D. Precise teaching is more effective teaching. Educational Leadership, 39(2), November 1981.
- Academic learning time. The best of ERIC on educational management, Number 65. Eugene, Oreg.: ERIC Clearinghouse on Educational Management, 1982. ERIC. ED 213 072.
- Algozzine, B., Ysseldyke, J., and Christensen, S. The influence of teachers' tolerances for specific kinds of behaviors on their ratings of a third grade student. The Alberta Journal of Educational Research, 29(2), June 1983.
- Allen, E. K. A study of the relationship of teacher enthusiasm to salient, selected variables influencing achievement in the vocational laboratory. Final Report. Philadelphia: Temple University, 1979. ERIC. ED 179 781.
- Allington, R. L. Teacher interruption behaviours during primary-grade oral reading. Journal of Educational Psychology, 72(3): 371-77, June 1980.
- Amato, J. A. Social class discrimination in the schooling process: Myth and reality. Urban Review, 12(3): 121-30, Fall 1980.
- Anania, J. The influence of instructional conditions on student learning and achievement. In H. J. Walberg and T. N. Postlethwaite (Eds.), Evaluation in education: An international review series 7. Chicago, Ill: Pergamon Press, 1983.
- Anderson J. and Withrow, J. The impact of lecturer nonverbal expressiveness on improving mediated instruction. Communication Education, 30, Oct. 1981.

Anderson, L. M. and Brophy, J. E. An experimental investigation of first grade reading group instruction. Report no. 76-3, 1976. Austin, Texas: Research and Development Center for Teacher Education.

Anderson, L. M., Evertson, C. M., and Brophy, J. E. An experimental study of effective teaching in first-grade reading. The Elementary School Journal, 79(4), March 1979.

Anderson, L. M., Evertson, C. M., and Emmer, E. T. Dimensions in classroom management derived from recent research. Journal of Curriculum Studies, 12(4), 1980.

Anderson, L. W. Learning time and educational effectiveness. Reston, Va.: National Association of Secondary School Principals, 1980. ERIC. ED 210 780. Microfiche only.

Andre, T. Does answering higher level questions while reading facilitate productive learning? Review of Educational Research, 49(2): 280-318, Spring 1979.

Archambault Jr., F. X., et al. The classroom activities log: A personalized record of a child's school day as recorded by his/her teacher. Paper presented at the annual meeting of the National Council on Measurement in Education, San Francisco, 1979. ERIC. ED 178 609.

Arlin, M. Teacher transitions can disrupt time flow in classrooms. American Educational Research Journal, 16(1): 42-56, Winter 1979.

Aspy, D. and Roebuck, F. Kids don't learn from people they don't like. Amherst, Mass.: Human Resource Development Press, 1977.

Baksh, I. J. and Martin, W. B. W. Teacher expectation and the student perspective. The Clearinghouse, 57(8), April 1984.

Bardwell, R. Feedback: How does it function? Journal of Experimental Education, 50(1): 4-9, Fall 1981.

Batson, A. D. Questioning: A reading/thinking foundation for the gifted. Paper presented at the annual meeting of the Southwest Regional Conference of the International Reading Association, San Antonio, 1981. ERIC. ED 201 999.

Beatty, M. J. and Behnke, R. R. Teacher credibility as a function of verbal content and paralinguistic cues. Communication Quarterly, 28(1): 55-59, Winter, 1980.

Becher, R. M. Teacher behaviors related to the mathematical achievement of young children. Journal of Educational Research, 73(6): 336-40, Jul-Aug. 1980.

Bechtol, W. and Anderson, D. Preventative discipline: A review of the literature. Small School Forum, 3(2), Winter 1981.

Becker, W. C. Symposium on direct instruction: The Follow Through data show that some programs work better than others. Paper presented at the annual meeting of the American Educational Research Association, Toronto, 1978. ERIC. ED 173 363.

Becker, W. C., and Gersten, R. A follow-up of Follow Through: The later effects of the direct instruction model on children in fifth and sixth grades. American Educational Research Journal, 19(1): 75-92, Spring 1982.

Bennett, N. Time to teach: Teaching-Learning processes in primary schools. East Lansing: Michigan State Univ. Institute for Research on Teaching, 1981. ERIC. ED 209 242.

Berliner, D. (Ed.) Research on teaching implications for practice. Washington, D.C.: National Institute of Education, 1982.

Bernstein, M. A. Teacher's lesson plans: The myth and the reality, 1981. ERIC. ED 202 813.

Bettencourt, E. M. et al. Effects of training teachers in enthusiasm on student achievement and attitudes. Paper presented at the annual meeting of the American Educational Research Association, Boston, 1980. ERIC. ED 194 592.

Block, J., and Burns, R. Mastery learning. In L. Sholman (Ed.), Review of research in education, Itasca, Ill.: F.E. Peacock, 1976.

Bloom, B. S. A new direction in education research: Alterable variables. Phi Delta Kappan, February 1980.

Bloom, B. S. New views of the learner: Implications for instruction and curriculum. Educational Leadership, 35, 1978.

Bloom, B. S. Time and Learning. American Psychologist, September 1974.

- Bloom, R. B., and Bourdon, L. Types and frequencies of teachers' written instructional feedback. Journal of Educational Research, 74(1): 13-15, Sept-Oct. 1980.
- Blosser, P. What research says: Teaching science to middle school students. School Science and Mathematics, 83(8), December 1983.
- Boak, R., and Conklin, R. The effect of teachers' levels of interpersonal skills on junior high school students' achievement and anxiety. American Educational Research Journal, 12(4), 1975.
- Bognar, C. J. Teacher expectations and student characteristics. Canadian Journal of Education, 8(1), 1983.
- Bognar, C. J. Dissonant feedback about achievement and teachers' expectations. The Alberta Journal of Educational Research, 28(3): 277-287, September 1982.
- Borg, W. R. Teacher coverage of academic content and pupil achievement. Journal of Educational Psychology, 71(5): 635-45, October 1979.
- Borg, W. R. and Ascione, F. R. Classroom management in elementary mainstreaming classrooms. Journal of Educational Psychology, 74(1): 85-95, Feb. 1982.
- Bowermaster, J. Classroom management. Washington, D.C.: ERIC Clearinghouse, 1981. (ERIC Short Report #1).
- Bozwick, B. E. A study of teacher questioning and student response. Interaction during pre story and post story portions of reading comprehension lessons. Paper presented at the annual meeting of the American Educational Research Association, New York, 1982. ERIC. ED 215 294. Microfiche only.
- Brimner, L. D. The effects of praise and blame on writing. English Journal, 71(1): 58-60, Jan. 1982.
- Brookover, W. B., and Lezotte, L. W. Changes in school characteristics coincident with changes in student achievement. Occasional Paper No. 17. East Lansing: Michigan State Univ., Institute for Research on Teaching, 1979. ERIC. ED 181 005.
- Brophy, J. Teacher praise: A functional analysis. A Review of Educational Research, 51, Spring 1984.

- Brophy, J. Successful teaching strategies for the inner-city child. Phi Delta Kappan, April 1982.
- Brophy, J. On praising effectively. Elementary School Journal, 81(5): 269-78, May 1981.
- Brophy, J. Teacher praise. A functional analysis. Review of Educational Research, 51(1): 5-32, Spring 1981.
- Brophy, J. E. Teachers' cognitive activities and overt behaviors. East Lansing: Michigan State Univ. Institute for Research on Teaching, 1980. ERIC. ED 200 561.
- Brophy, J. Advances in teacher effectiveness research. East Lansing, MI.: Michigan State University Institute for Research on Teaching, 1979.
- Brophy, J. E. Advances in teacher research. The Journal of Classroom Instruction, Winter 1979.
- Brophy, J. and Evertson, C. Learning from teaching: A developmental perspective. Boston: Allyn and Bacon, Inc, 1976.
- Brophy, J. E., and Good, T. L. Teacher behavior and student achievement. In M. Wittrock (Ed.), Handbook of research on teaching (3rd. ed.). New York: Macmillan 1985 (?).
- Brophy, J. E. and Putnam, J. G. Classroom management in the elementary grades. Research Series No. 32. East Lansing: Michigan State Univ. Institute for Research on Teaching, 1978. ERIC. ED 167 537.
- Canadian Teachers' Federation. Teacher effectiveness research. Part I: General works. Bibliographies in Education No. 77. Ottawa, Ontario: Canadian Teachers' Federation, 1984.
- Canadian Teachers' Federation. Teacher effectiveness research. Part II: Special topics. Bibliographies in Education, No. 78. Ottawa, Ontario: Canadian Teachers' Federation, 1984.
- Carnie, D. Direct instruction: A successful system for educationally high risk children. Journal of Curriculum Studies, 11(1): 29-45, Jan-Mar. 1979.

Caruso, V. M. Teacher enthusiasm behaviors reported by teachers and students. Paper presented at the annual meeting of the American Educational Research Association, New York, 1982. ERIC. ED 217 038.

CEDR. Center on Evaluation, Development, and Research. Effective classroom management. (Hot Topic Series). Bloomington, IN: CEDR, Phi Delta Kappa, 1982-83.

Centra, J. A. and Potter, D. A. School and teacher effects: An interrelated model. Review of Educational Research, 50(2), Summer 1980.

Cherry, L. J., and Berman, L. S. Teacher-student interaction and teachers' perceptions of students' communicative competence: A cross-sectional study. Technical Report No. 473. Madison: Wisconsin Univ. Research and Development Center for Individualized Schooling, 1978. ERIC. ED 166 670.

Cicchelli, T. Forms and functions of instruction patterns: Direct and nondirect. Instructional Science, 12(4), December 1983.

Cicchelli, T. Implementing the direct instruction pattern: A study with primary grade low SES children. Urban Education, 17(4): 419-30, Jan. 1983.

Clark, C. M. and Yinger, B. Research on teacher planning: A progress report. Journal of Curriculum Studies, 11(2): 175-77, Apr-June 1979.

Clark, C. M., and Yinger R. J. The hidden world of teaching: Implications of research on teacher planning. Research series No. 77. Paper presented at the annual meeting of the American Educational Research Association, Boston, 1980. ERIC. ED 191 844.

Clifford, M. M. The effects of quantitative feedback on children's expectations of success. British Journal of Educational Psychology, 48: 220-6, June 1978.

Clifton, R. A. The effects of students' ethnicity and sex on the expectations of teachers. Interchange on Educational Policy, 12(1): 31-38, 1981.

Clifton, R. A. Ethnicity, teachers' expectations and the academic achievement process in Canada. Sociology of Education, 54(4): 291-301, Oct. 1981.

Cogan, M. L. The behavior of teachers and the productive behavior of their pupils. Journal of Exceptional Children, 1958.

- Coker, H., Medley, D., and Soar, R. How valid are expert opinions about effective teaching? Phi Delta Kappan, October 1980.
- Comparison and identification. Time leader's guide. Basic skills instructional improvement program. Philadelphia, Pa.: Research for Better Schools, Inc., 1980. ERIC. ED 193 201.
- Cookson, C. The effects of content and structure in teacher behavior and student engaged time. Paper presented at the annual meeting of the American Educational Research Association, Boston, 1980.
- Cooper, H., et al. Relations between student achievement and various indexes of teacher expectations. Journal of Educational Psychology, 74(4): 577-79, Aug. 1982.
- Cooper, H. M., et al. Teachers' beliefs about interaction control and their observed behavioral correlates. Journal of Educational Psychology, 72(3): 345-54, June 1980.
- Cornbleth, C. and Korth, W. Context factors and individual differences in pupil involvement in learning activity. Journal of Educational Research, 73(6): 318-23, Jul-Aug. 1980.
- Costa, A. Recent research on the analysis of instruction. Phi Delta Kappan, May-June 1977.
- Cotton, K. and Savard, W. G. Time factors in learning. Research on school effectiveness project: Topic summary report. Portland, Oreg.: Northwest Regional Educational Lab., 1981. ERIC. ED 214 706.
- Crano, W. D., and Mellon, P. M. Causal influence of teachers' expectations on children's academic performance: A Cross-Lagged panel analysis. Journal of Educational Psychology, 70(1): 39-49, Feb. 1978.
- Crowell, D. C., and Hu-pei Au, K. A scale of questions to guide comprehension instruction. Reading Teacher, 34(4): 389-93, Jan. 1981.
- Cruickshank, D. R. Applying research on teacher clarity. Journal of Teacher Education, XXXVI(2): 44-47, March-April 1985.
- Cruickshank, D. R., et al. Clear teaching: What is it? British Journal of Teacher Education, 5(1), January 1979.

- Curwin, R. Are your statements addicted to praise? Instructor, 90(3): 61-62, Oct. 1980.
- Curwin, R. L. and Mendler, A. N. High standards for effective discipline. Educational Leadership, 41(8), May 1984.
- Daines, D. Teachers' oral questions and subsequent verbal behaviors of teachers and students, 1982. ERIC. ED 225 979.
- Defino, E., and Carter H. (Eds.). Changing teacher practices: Proceedings of a national conference (Austin, Texas, October, 1981). Austin, Texas Univ. Research and Development Center for Teacher Education, February 1982. ERIC. ED 223 582.
- Denham, C. H. and Michael, J. J. Teacher sense of efficacy: A definition of the construct and a model for further research. ERO, 6(1), Spring 1981.
- Dillon, J. T. Cognitive correspondence between question/statement and response. American Educational Research Journal, 19(4): 540-51, Winter 1982.
- Dillon, J. T. To question and not to question during discussions. I. Questioning and discussion. Journal of Teacher Education, 32(5): 51-55, Sept-Oct. 1981.
- Dillon, J. T. To question and not to question during discussion. II. Non-questioning techniques. Journal of Teacher Education, 32(6): 15-20, Nov-Dec. 1981.
- Donlan, D. and Singer, H. Active comprehension of short stories. Paper presented at the annual meeting of the Claremont Reading Conference. Claremont, Ca., 1979. ERIC. ED 170 705.
- Doyle, W. Making managerial decisions in classrooms. In D. L. Duke (Ed.), Classroom management. Chicago: National Society for the Study of Education, University of Chicago Press, 1979.
- Duffy, G. G., et al. Two styles of direct instruction in teaching second-grade reading and language arts: A descriptive study. East Lansing, Michigan State Univ. Institute for Research on Teaching, 1981. ERIC. ED 212 996.
- Duke, D. L. (Ed.). Helping teachers manage classrooms. Alexandria, Virginia: Association for Supervision and Curriculum Development, 1982.

- Dykman, B. and Reis, T. Personality correlates of classroom seating position. Journal of Educational Psychology, 71(3): 346-54, June 1979.
- Easton, J. Q., et al. Relationship among student time on task, orientation of teachers, and instructional grouping in elementary reading classes. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979. ERIC. ED 169 503.
- Eder, D. The impact of management and turn-allocation activities on student performance. Discourse Processes, 5(2): 147-59, Apr. - June 1982.
- Edwards, C. H. and Surma, M. The relationship between type of teacher reinforcement and student inquiry behavior in science. Journal of Research in Science Teaching, 17(4): 337-41, July 1980.
- Elijah, D. Teacher expectations: Determinants of pupils' reading achievement. Reading Improvement, 17(2): 117-21, Summer 1980.
- Emmer, E. T. Effective management in junior high mathematics classrooms. Austin: Texas Univ. Research and Development Center for Teacher Education, 1981. ERIC. ED 206 448.
- Emmer, E. T., et al. The first weeks of class. . . And the rest of the year. Research and Development Report No. 6005. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979. ERIC. ED 175 861.
- Enseki, R. and Hancock, R. K. Identification of teaching orientations. Teaching Sociology, 7(1), October 1979.
- Entwistle, D. R., and Hayduk, L. A. Academic expectations and the school attainment of young children. Report No. 269. Baltimore, Md.: John Hopkins Univ. Center for Social Organization of Schools, 1978. ERIC. ED 174 359.
- ERIC Document Improving teacher effectiveness. The best of ERIC on educational management (70). National Institute of Education, Washington, D.C., 1983. ERIC. ED 233 431.
- Evertson, C. M. Differences in instructional activities in high and low achieving junior high classes. Research and Development. Report Number 6106. Austin: Texas Univ. Research and Development Center for Teacher Education, 1980. ERIC. ED 195 546.

- Evertson, C. M., et al. Relationships between classroom behaviors and student outcomes in junior high mathematics and English classes. American Educational Research Journal, 17(1): 43-60, Spring 1980.
- Finkelstein, J. M. and Ritter, V. F. Does anyone have any questions? 1980. ERIC. ED 188 768.
- Fisher, C. W., et al. Teaching behaviours, academic learning time, and student achievement: An overview. Journal of Classroom Interaction, 17(1): 2-15, Winter 1981.
- Fisher C. W., et al. Teaching behaviors, academic learning time and student achievement: Final Report of Phase III-B, Beginning Teachers Evaluation Study. Technical Report V-1. San Francisco, Calif.: Far West Lab for Educational Research and Development, 1978. ERIC. ED 183 525.
- Fisher, C. W., et al. Teaching and learning in the elementary school: A summary of the beginning teacher evaluation study. Report VII-I. Beginning Teacher Evaluation Study Technical Report Series. San Francisco: Far West Lab for Educational Research and Development, 1978. ERIC.
- Flanders, N. A. Analyzing teacher behavior. Reading, Mass.: Addison - Wesley, 1970.
- Flanders, N. Teacher influences, pupil attitudes and achievement. Washington, D.C. U.S. Government Printing Office, 1965.
- Fox, R., Luszki, M. B., and Schmuck, R. Diagnosing classroom learning environments. Chicago: Science Research Associates, Inc., 1966.
- Frederick, W., et al. Procedures and use of time in reading classes in high-gain and low-gain elementary schools in Chicago. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979. ERIC. ED 176 237.
- Frieberg, H. J. Applying research to the classroom. Journal of Classroom Interaction, 16 (1).
- Fry, P. S. Process measures of problem and non-problem children's classroom behavior: The influence of teacher behavior variables. British Journal of Educational Psychology, 53(1): 79-83, Feb. 1983.

- Gabrys, R. E. An analysis of the influence of a training intervention for business-like behavior on the business-like behavior and level of warmth of preservice elementary teachers. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979. ERIC. ED 171 681.
- Galluzzo, G. R. Changing teacher performance with protocols. Paper presented at annual meeting of the American Educational Research Association, New York, 1982. ERIC. ED 215 973.
- Gambrell, L. B. Think-Time: Implications for reading instruction. Reading Teacher, 34(2): 143-46, Nov. 1980.
- Gersten, R. and Carine, D. Direct instruction mathematics: A longitudinal evaluation of low-income elementary school students. The Elementary School Journal, 84(4), 1984.
- Gettinger, M. and White, M. A. Which is the stronger correlate of school learning? Time to learn or measured intelligence? Journal of Educational Psychology, 71(4): 405-12, Aug. 1979.
- Gillett, M. and Gall, M. The effects of teacher enthusiasm on the at-task behavior of students in elementary grades, 1980. ERIC. ED 202 823.
- Gold, S. What's wrong with telling? Clearinghouse, 57(7), March 1984.
- Goldstein, J. M., and Weber, W. A. Teacher managerial behaviors and student on-task behavior. Paper presented at the annual meeting of the Southwest Educational Research Association, Houston, 1979. ERIC. ED 178 484.
- Good, T. L. Listening to students talk about classrooms. Paper presented at annual meeting of American Educational Research Association, Los Angeles, 1981.
- Good, T. L. Teacher effectiveness in the elementary school. Journal of Teacher Education, 30(2): 52-64, Mar-April 1979.
- Good, T. L, Biddle, B. and Dunkin, M. Teachers make a difference. N.Y.: Holt, Rinehart and Winston, 1975.
- Good, T. L. and Brophy, J. E. Looking in classrooms (3rd Ed.). New York: Harper & Row Publishers, 1984.

- Good, T. L. and Grouws, D. The Missouri mathematics effectiveness project. An experimental study in fourth-grade classrooms. Journal of Educational Psychology, 7(3), 1979.
- Good, T. L. and Grouws, D. Teaching effects: A process-product study in fourth grade mathematics classrooms. Journal of Teacher Education, 28, May-June 1977.
- Good, T. L., et al. Teaching mathematics in high and low SES classrooms: An empirical comparison. Journal of Teacher Education, 29(5):85-90, Sept-Oct. 1978.
- Goodall, R. and Brown, L. The development of an instrument to assess classroom climate. The Journal of Classroom Interaction, 19(1), Winter 1983.
- Gooding, C. T. and Swift, J. N. Modifying teacher questioning behavior in classroom instruction. Paper presented at the annual meeting of the Eastern Educational Research Association, West Palm Beach, 1982. ERIC. ED 214 769.
- Goody, J. R. and Kelly, L. E. Down safe corridors: Eliminating school disruption. NASSP Bulletin, May 1984.
- Grapko, M. F. The relation of teacher expectancy and pupil self-assessment to pupil performance. Ontario Ministry of Education, 1980.
- Graves, D. H. and Giacobbe, M. E. Research update: Questions for teachers who wonder if their writers change. Language Arts, 49(5): 495-503, May 1982.
- Guida, Frank, and others. Academic anxiety, time-on-task and achievement: A structural model. Paper presented at the annual meeting of the American Educational Research Association, Montreal 1983. ERIC. ED 228 290.
- Gurin, P. and Morrison, B. M. Two-way socialization processes in the classroom. Final Report. Ann Arbor: Michigan Univ. Institute for Social Research, 1980. ERIC. ED 198 194.
- Guskey, T. R. The effects of change in instructional effectiveness on the relationship of teacher expectations and student achievement. Journal of Educational Research, 75(6): 345-49, July-Aug. 1982.
- Hannafin, M. J. The effects of systematized feedback on learning in natural classroom settings. Educational Research Quarterly, 7(3): 22-29, Fall 1982.

- Harnischfeger, A. Curricular control and learning time: District policy, teacher strategy, and pupil choice. Paper presented at the annual conference of the Indiana School Board Association, October 1979.
- Harrison, M. Class achievement and the background and behavior of teachers. Elementary School Journal, 77(1), September 1976.
- Harvey, K. D. Classroom management: An annotated bibliography, 1980. ERIC. ED 198 075.
- Helm, D. J. To discipline or not to discipline. Clearinghouse, 57(7), March 1984.
- Hiatt, D. B. and Keesling, J. W. The Dependability of classroom observations. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979. ERIC. ED 175 929. Microfiche only.
- Hines, C. V., et al. Measures of teacher clarity and their relationships to student achievement and satisfaction. Paper presented at the annual meeting of the American Educational Research Association, New York, 1982. ERIC. ED 222 531.
- Hodges, D. L. How to improve your students' learning through practice exercises and feedback, 1980. ERIC. ED 220 150.
- Hoffman, J. V. Feedback to oral reading miscues. Parts I & II. Final Report, 1981. ERIC. ED 227 455.
- Hoffman, J. V. Feedback to oral reading miscues. Part III. Final Report, 1982. ERIC. ED 227 456.
- Holliday, W. G. Overprompting science students using adjunct study questions. Journal of Research in Science Teaching, 20(3): 195-201, March 1983.
- Holmes, M. What are you doing with your time? Orbit, 10(5): 10-11, December 1979.
- Honea, Jr. J. Wait-Time as an instructional variable: An influence on teacher and student. Clearing House, 56(4): 167-70, Dec. 1982.
- Hughes, J. R. How do you behave? Your nonverbal actions are critical to student motivation. Music Educators Journal, 67(5): 52-53, Jan. 1981.

Huitt, W. and Segars, J. Characteristics of effective classrooms. Philadelphia: Research for better schools. October, 1980. ERIC. ED 207 216.

Huitt, W. G., et al. Monitoring and evaluating the critical dimensions of effective classrooms. Philadelphia, PA: Research for better schools, Inc, 1982. Paper presented at the annual meeting of the American Educational Research Association, 1982. ERIC. ED 221 597.

Hutslar, S. The expectancy phenomenon. Journal of Physical Education and Recreation, 52(7): 88-89, Sept. 1981.

Jacobson, K. The relationship of individual student time allocation to reading and mathematics achievement. Report from the project on Studies of Administration and Organization for Instruction. Madison: Wisconsin Univ. Research and Development Center for Individualized Schooling, 1980. ERIC. ED 196 906.

Jesse, K. School reviews: Pursuing effectiveness. The Canadian School Executive, March 1984.

Jeter, J. Teacher expectations and teacher classroom behavior. Educational Leadership, April 1973.

Jeter, J. T. and Davis, Jr. O. L. Differential classroom interaction in social studies as a function of differential expectations of pupil achievement. Journal of Social Studies Research, 6(1): 1-7, Winter 1982.

Jones, V. F. and Jones L. Comprehensive classroom management. Newton, Mass.: Allyn and Bacon (forthcoming).

Karweit, N. L. Time-on-Task: A research review. Report No. 332. Baltimore: Center for Social Organization of Schools, Johns Hopkins University, Jan. 1983.

Kennedy, J. J., et al. Additional investigations into the nature of teacher clarity. Journal of Educational Research, 72(1): 3-10, Sept-Oct. 1978.

Koerin, B. Teaching effectiveness and faculty development programs: A review. The Journal of General Education, 32(1), Spring 1980.

Kounin, J. Discipline and group management in classrooms. N.Y.: Holt, Rinehart, and Winston, 1970.

Kounin, J. S. Observing and delineating techniques of managing behavior in classrooms. Journal of Research and Development in Education, 4(1), Fall 1970.

Kuceris, M. Time on the right task can boost student success. Executive Educator, 4(8): 17-19, 26, Aug. 1982.

Kuceris, M. and Zakariya, S. (Eds.). Time on task: Using instructional time more effectively. Arlington, Va.: American Association of School Administrators, 1982. ERIC. ED 221 924.

Land, M. L. and Denham, A. Effect of teacher clarity on student achievement. Paper presented at the annual meeting of the Southwest Educational Research Association, Houston, 1979. ERIC. ED 177 127.

Land, M. L. and Smith, L. R. Low inference teacher clarity variables: Effects on student achievement. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979. ERIC. ED 179 499.

Larkins, A. G. and McKinney, C. W. Two studies of the effects of teacher enthusiasm on social studies achievement of seventh grade students. Theory and Research in Social Education, 10(1): 27-41, Spring 1982.

Lembo, J. The psychology of effective classroom instruction. Columbus, Ohio: Charles E. Merrill, 1969.

Levin, B. Managing an effective classroom. The Canadian School Executive, March 1984.

Levin, T. Instruction which enables students to develop higher mental processes. Evaluation in Education, 3, 1979.

Levin, T. and Long, R. Effective instruction. Alexandria, Va.: Association for Supervision and Curriculum Development, 1981. ERIC. ED 200 572. Microfiche.

Lockavitch, Jr. J. F. Seating arrangement and classroom behavior: A simple but sometimes overlooked method for classroom control, 1979. ERIC. ED 179 014.

Lond, M. L. Combined effect of two teacher clarity variables on student achievement. Journal of Experimental Education, 50(1), Fall 1981.

Low, L. and Wolfle, L. M. Effects of a first grade teacher on students' achievement in four subsequent years. Elementary School Journal, 83(5): 528-36, May 1983.

MacKay, D. A. Project Quest: Teaching strategies and pupil achievement. Edmonton: Centre for Research in Teaching, University of Alberta, 1979.

Mahlis, M. and D'Angelo, K. Teacher questions: An experimental analysis of the question effect hypothesis. Paper presented at the annual meeting of the Association of Teacher Educators, Orlando, 1983. ERIC. ED 227 062.

Martinek, T. J. Pygmalion in the gym: A model for the communication of teacher expectations in physical education. Research Quarterly, 52(1): 58-67, Mar. 1981.

Martin, W. R. Teacher behaviors - Do they make a difference? A review of the research. Phi Kappa Delta Record, December 1979.

McCaleb, J. L. and Rosenthal B. G. Relationships in teacher clarity between students' perceptions and observers' ratings. Journal of Classroom Interaction, 19(1), Winter 1983.

McCaleb, J. L. and White, J. A. Critical dimensions in evaluating teacher clarity. Journal of Classroom Interaction, 15(2): 27-30, Summer 1980.

McFaul, S. A. An examination of direct instruction. Educational Leadership, 40(7): 67-69, Apr. 1983.

McKenzie, G. R. and Henry, M. Effects of testlike events on on-task behavior, test anxiety, and achievement in a classroom rule-learning task. Journal of Educational Psychology, 71(3): 370-74, June 1979.

McKinney, C. W. and Larkins, A. G. Effects of high, normal and low teacher enthusiasm on secondary social studies achievement. Social Education, 46(4): 290-92, Apr. 1982.

McLaughlin, T. F., et al. A timer game: Effects for on-task behavior and generalization for academic behavior for an entire special education class. Contemporary Educational Psychology, 4(2): 172-74, Apr. 1979.

Medley, D. M. The effectiveness of teachers. In P. L. Peterson and H. J. Walberg (Eds.), Research on teaching. Berkeley, CA.: McCutchan, 1979.

Medley, D. M. Teacher competence and teacher effectiveness. American Association of Colleges for Teacher Education, Washington, D. C., 1977.

- Meyer, L. A. Long-term academic effects of the direct instruction project Follow Through. The Elementary School Journal, 84(4), 1984.
- Miller, R. and Bositis D. Alternative teaching techniques. Teaching Political Science, 6(3), April 1979.
- Minner, S. Expectations of vocational teachers for handicapped students. Exceptional Children, 48(5): 451-53, Feb. 1982.
- Mintz, L. and Yarger, S. J. Conceptual level and teachers' written plans. Paper presented at the annual meeting of the American Educational Research Association, Boston, 1980. ERIC. ED 189 030.
- Morine-Dersheimer, G. A study of teacher planning. Special Study C. Beginning Teacher Evaluation study. Technical report series. San Francisco: Far West Lab. for Educational Research and Development, 1976. ERIC. ED 146 160.
- Mukhopadhyay, S., and Chugh, A. Developing a strategy for minimizing under-achievement through teacher classroom behavior. 1979. ERIC. ED 207 725. Microfiche only.
- Munroe, M. J. Effective teacher behaviors as an avenue to enhance the self-esteem of teachers. Paper presented at an inservice held at Cholla High School, Tucson, 1982. ERIC. ED 228 162.
- National Education Association. Project on utilization of inservice education R & D outcomes. Effective questioning: Elementary level (Minicourse 1). Description of teacher inservice education materials, 1976. ERIC. ED 167 531.
- National Education Association. Project on utilization of inservice education R & D outcomes. Effective questioning techniques (Implementative Module 3). Description of teacher inservice education materials, 1977. ERIC. ED 166 189.
- National Education Association. Project on utilization of inservice education R & D outcomes. Higher cognitive questioning (Minicourse 9). Description of teacher inservice education materials, 1976. ERIC. ED 167 530.
- National Education Association. Project on utilization of inservice education R & D outcomes. Protocol modules on classroom management (overview). Description of teacher inservice education materials, 1977. ERIC. ED 167 546.

- National Education Association. Project on utilization of inservice education R & D outcomes. Questioning skills (Cluster V; 5 Modules -- a summary). Description of teacher inservice education materials, March 1977. ERIC. ED 169 064.
- National Education Association. Project on utilization of inservice education R & D outcomes. Questioning that turns students on rather than off. Description of teacher inservice education materials, February 1977. ERIC. ED 171 685.
- National Education Association. Project on utilization of inservice education R & D outcomes. The use of higher level questions (Module 2). Description of teacher inservice education materials, 1977. ERIC. ED 169 002.
- National Education Association. Project on utilization of inservice education R & D outcomes. The use of questioning in social studies. Description of teacher inservice education materials, 1977. ERIC. ED 169 063.
- National School Boards Association. Student discipline: Practical approaches, 1979. ERIC. ED. 177 691. Microfiche only.
- Noonan, R. and Wold H. The Bloom model of human characteristics and school learning. Evaluation of Education, 7, 1983.
- Oien, F. M. Teacher directed behavior toward individual students, 1979. ERIC. ED. 175 826.
- Ornstein, A. Do teachers make a difference? Childhood Education, May-June 1983.
- Ornstein, A. and Levine, D. Teacher behavior research: Overview and outlook. Phi Delta Kappan, 62, April 1981.
- Orpen, C. Student versus lecturer assessment of learning: A research note. Higher Education, 11, 1982.
- Pandya, H. S. Teacher expectancy related to student performance in vocational education. University Park, Pa.: Pennsylvania State Univ. Department of Agriculture Education, 1978. ERIC. ED 160 890. Microfiche only.
- Parsons, J. E., et al. The effects of teachers' expectancies and attributions on students' expectancies for success in mathematics. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979. ERIC. ED 180 787.

- Peterson, P. L. Direct instruction: Effective for what and for whom? Educational Leadership, 40(7): 67-69, Apr. 1983.
- Peterson, P. Direct instruction reconsidered. In Author and H. J. Walberg (Eds.), Research on teaching: Concepts, findings and implications. Berkeley, CA.: McCutchan, 1979.
- Piechowski, M. M. and Colangelo, N. Developmental potential of the gifted. Gifted Child Quarterly, 28(2), Spring 1984.
- Pittman, S. I. A cognitive ethnography and quantification of a first grade teacher's selections of strategies to manage students. Paper presented at the annual meeting of the Southwest Educational Research Association, Houston, Texas, 1983. ERIC. ED 225 967.
- Placek, J., et al. Academic learning time (ALT-PE) in a traditional elementary physical education setting: A descriptive analysis. Journal of Classroom Interaction, 17(2): 41-47, Summer 1982.
- Probst, D. A study of time on-task in three teachers' classrooms using different instructional modes. Report from the project on Studies of Instructional Programming for the Individual Student. Madison: Wisconsin Univ. Research and Development Center for Individualized Schooling, 1980. ERIC. ED 196 905.
- Proctor, C. P. Teacher expectations: A model for school improvement. The Elementary School Journal, March 1984.
- Project, T.E.A.C.H. Teacher effectiveness and classroom handling. Performance Learning Systems. 446 Old Hook Road, Suites 25-26, Emerson, New Jersey, 07630, 1974. (A training course under the auspices of the Alberta Teachers' Association).
- Raphael, D., Wahlstrom, M., and McLean, L. Are boys better at math than girls? Orbit 70, 15(2), April 1984.
- Ratsoy, E. W. Accounting for differences in teacher effectiveness criteria. The Canadian Administrator, 10(8), May 1971.
- Ratsoy, E. W. Characteristics and instructional practices of Alberta teachers in 1968-1969. Edmonton: Alberta Advisory Committee on Educational Studies, 1970.

Reaves, C. A., and Shine, S. C. A study of the effects of prefatory remarks on teacher evaluation, 1977. ERIC. ED. 175 811.

Redfield, D. L., and Rousseau, E. W. A meta-analysis of experimental research on teacher questioning behavior. Review of Educational Research, 51(2): 237-45, Summer 1981.

Richey, L. S., et al. Teachers' attitudes and expectancies for siblings of learning disabled children. Minneapolis: Minnesota Univ. Institute for Research on Learning Disabilities, 1980. ERIC. ED 203 613.

Riley, H. J. P. A comparison of three methods of improving preservice science teachers' questioning knowledge and attitudes toward questioning. Journal of Research in Science Teaching, 17(5): 419-24, Sept. 1980.

Roehler, L. R. and Duffy, G. G. Matching direct instruction to reading outcomes. Language Arts, 49(5): 476-80, May 1982.

Roscoe, B. and Peterson, K. Teacher and situational characteristics which enhance learning and development. College Student Journal, 16(4), Winter 1982.

Rosenshine, B. Classroom instruction. In N. Gage (Ed.), The psychology of teaching methods Part II. Chicago: National Society for the Study of Education, University of Chicago Press, 1976.

Rosenshine, B. Enthusiastic teaching: A research review. School Review, 78(4), August 1970.

Rosenshine, B. V. Content, time and direct instruction. In P. L. Peterson and H. J. Walberg (Eds.), Research in teaching: Concepts, findings and implications. Berkeley, CA.: McCutchan, 1979.

Rosenthal, R. The pygmalion effect lives. Psychology Today, September 1973.

Rosenthal, R. and Jacobson, L. Pygmalion in the classroom. New York: Holt, Rinehart and Winston, 1968.

Rosner, F. C. The future of teaching as a profession: Assessing classroom management skills. Paper presented at the annual meeting of the American Association of Colleges for Teacher Education, Detroit, 1983. ERIC. ED 228 165.

- Ross, R. P. What's happening in elementary school classrooms? A review of selected literature, 1982. ERIC. ED 222 248.
- Rounds, T. S., et al. An analysis of teachers' rule systems at a successful school. Verification inquiry, Volume IV. Ecological perspectives for successful schooling practice. San Francisco: Far West Lab. for Educational Research and Development, 1981. ERIC. ED 230 498.
- Rucker, G. H. The teacher questioning measure, 1980. ERIC. ED 190 525.
- Russell, T. L. Developing self-monitoring skills in pre-service science teacher education. Paper presented at the annual meeting of the Canadian Society for the Study of Education, Montreal, 1980.
- Ryan, D. W. and Butler, L. F. Effectiveness of teaching: The Canadian experience. Studies in Educational Evaluation, 7, 1982.
- St. George, A. Teacher expectations and perceptions of Polynesian and Pakeha pupils and the relationship to classroom behavior and school achievement. British Journal of Educational Psychology, 53(1): 48-59, Feb. 1983.
- Salzberg, R.S. and Salzberg, C. L. Praise and corrective feedback in the remediation of incorrect left-hand positions of elementary string players. Journal of Research in Music Education, 29(2): 125-33, Summer 1981.
- Sanford, J. P. and Evertson, C. M. Time use and activities in junior high classes. Journal of Educational Research, 76(3): 140-47, Jan-Feb. 1983.
- Saxon, J. Incremental development: A breakthrough in mathematics.- Phi Delta Kappan, 63(7): 482-84, Mar. 1982.
- Seifert, E. H. and Beck Jr., J. J. Time/Learning relationships in secondary schools: A research report, 1983. ERIC. ED 229 853.
- Slavin, R., Leavey, M., and Madden, N. Combining cooperative learning and individualized instruction: Effects on student mathematics achievement, attitudes, and behaviors. The Elementary School Journal, 84(4), 1984.
- Slavin, R. E. and Karweit, N. L. Cognitive and affective outcomes of an intensive student team learning experience. Journal of Experimental Education, 50(1), Fall 1981.

Sloan, L. and Toews, R. Good questioning techniques. The Canadian School Executive, March 1984.

Smith, B. D. Responding effectively to incorrect answers. Social Studies, 72(2): 56-60, Mar-Apr. 1981.

Smith, H. A. Nonverbal behavior and student achievement in the elementary classroom. Paper presented at the meeting of the Canadian Society for the Study of Education, Saskatoon, 1979. ERIC. ED 181 000.

Smith, L. R. Teacher clarifying behaviors: Effects on student achievement and perceptions. Journal of Experimental Education, 55(3): 162-169, 1985.

Smith, L. R. Task-Oriented lessons and student achievement. Journal of Educational Research, 73(1): 16-19, Sept. - Oct. 1979.

Smith, L. R. and Bramblett, G. H. The effect of teacher vagueness terms on student performance in high school biology. Journal of Research in Science Teaching, 18(4): 353-60, July 1981.

Smith, L.R. and Cotten, M. L. Effect of lesson vagueness and discontinuity on student achievement and attitudes. Journal of Educational Psychology, 72(5): 670-75, Oct. 1980.

Smith, L. R. and Land, M. L. Low-inference verbal behaviors related to teacher clarity. Journal of Classroom Interaction, 17(1):37-42, Winter 1981.

Smith, L. R. and Land, M. L. Student perception of teacher clarity in mathematics. Journal of Research in Mathematics, 11:137-146, 1980.

Smith, L. R., Smith, D. D., and Staples, P. R. Effect of teacher transitions and superfluous content on student achievement and on perception of lesson effectiveness in high school English. Journal of Educational Research, 75(3), February 1982.

Smith, L. R., et al. Effect of teacher transitions and superfluous content on student achievement and on perception of lesson effectiveness in high school English. Journal of Educational Research, 75(3): 173-77, Jan. - Feb. 1982.

Soar, R. Final report: Follow Through classroom process measurement and pupil growth. Gainesville, Florida: College of Education, U. of Florida, 1973.

Soar, R. S. Measures of quality in the classroom. Journal of Classroom Interaction, 18(2), Summer 1983.

Stallings, J. and Kaskowitz, D. A study of Follow Through implementation. Paper presented to the annual meeting of the A.E.R.A., April 1975.

Stennett, R. G. DISTAR reading program in junior opportunity classes: Phase III-- Impact of two full years of instruction. Special Education in Canada, 53(2): 7-10, Winter 1979.

Stennett, R. G. and Earl, L. M. Elementary French program evaluation: The effect of successive increases in instructional time. Research Report 82-01. London, Ont.: London Board of Education, Educational Research Services, 1982. ERIC. ED 221 042.

Stern, P. R. and Shavelson, R. J. The relationship between teachers' grouping decisions and instructional behaviors: An ethnographic study of reading instruction. Paper presented at the annual meeting of the American Educational Research Association, Los Angeles, 1981. ERIC. ED 201 971.

Stillman, P. L., Gillers, M. A., Heins, M., Nicholson, G., and Sabers, D. L. Effect of immediate student evaluations on multi-instructor course. Journal of Medical Education, 58(3), March 1983.

Stringer, B. R., and Hurt, H. T. To praise or not to praise: Factors to consider before utilizing praise as a reinforcing device in the classroom communication process. Paper presented at the annual meeting of the Southern Speech Communication Association, Austin, 1981. ERIC. ED 202 054.

Strother, D. Another look at time-on-task. Phi Delta Kappan, June 1984.

Strother, D. B. Practical applications of research. Phi Delta Kappan, 66(10), June 1985.

Stumpf, S. A. and Freedman, R. D. Expected grade covariation with student ratings of instruction: Individual versus class effects. The Journal of Educational Psychology, 71(3), June 1979.

Styles, K. and Cavanagh, G. The discipline dilemma. Education Canada, 22(2), Summer 1982.

- Swann, Jr. W. B., and Snyder, M. On translating beliefs into action: Theories of ability and their application in an instructional setting. Journal of Personality and Social Psychology, 38(6): 879-88, June 1980.
- Swift, J. N. Wait time and questioning skills of middle school science teachers. Final Technical Report. New York: New York State Univ. System, 1982. ERIC. ED 220 276.
- Talmage, H. and Rasher, S. P. A study of the effects of three dimensions of instructional time on academic achievement. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, April 1979.
- Taylor, J. L. Teacher characteristics and classroom behavior. Journal of classroom Instruction, 16(1).
- Tobin, K. G. and Capie, W. The relationships of selected dimensions of teacher performance with student engagement. Paper presented at the annual meeting of the Mid South Educational Research Association, New Orleans, 1980. ERIC. ED 194 521.
- Tobin, K. G. and Capie, W. Student engagement in middle school science classrooms. Paper presented at the annual meeting of the Southeastern Association for the Education of Teachers of Science, Orlando, FL, 1980. ERIC. ED 194 522.
- Tobin, K. G. The effect of an extended teacher wait-time on science achievement. Journal of Research in Science Teaching, 17(5): 469-75, Sept. 1980.
- Vartuli, S. and Phelps, C. Classroom transitions. Childhood Education, 57(2): 94-96, Nov. - Dec. 1980.
- Veldman, D. and Brophy, J. Measuring teacher effects on pupil achievement. Journal of Educational Psychology, 66(3), June 1974.
- Veldman, D. and Brophy, J. Do teachers make a difference? A report of recent research on pupil achievement. U. S. Department of Health, Education and Welfare, Office of Education: U. S. Government Printing Office.
- Weber, W. A., et al. A mini-instructional system for increasing teacher classroom management competence. Paper presented at the annual meeting of the Association of Teacher Educators, Orlando, 1979. ERIC. ED 170 273.

- Weinstein, R. S., and Middlestadt, S. E. Learning about the achievement hierarchy of the classroom: Through children's eyes. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, April 8-12, 1979. ERIC. ED 170 071.
- Winnie, P. and Marx, R. Perceptual problem solving. In P. L. Peterson and H. J. Walberg (Eds.), Research on teaching: Concept findings and implications. Berkeley, CA.: McCutchan, 1979.
- Woolfolk, A. E. Student learning and performance under varying conditions of teacher verbal and nonverbal evaluative communication. Journal of Educational Psychology, 70(1): 87-94, Feb. 1978.
- Workman, E. A., et al. The consultative merits of praise-ignore versus praise-reprimand instruction. Journal of School Psychology, 18(4): 373-80, Winter 1980.
- Worshan, M. E. and Evertson, C. M. Systems of student accountability for written work in junior high school English classes. R & D Report No. 6105. Austin: Texas Univ. Research and Development Center for Teacher Education, 1980. ERIC. ED 196 008.
- Yager, R. E. and Penick, J. E. What students say about science teaching and science teachers. Science Education, 68(2), 1984.
- Young, C. B. Talk and control. The Canadian School Executive, March 1984.
- Zingle, H. W. The relationship of the affective and cognitive domains. Mimeographic paper. Alberta Education. 1984.

References

EVALUATION PROCEDURES

- Abramson, P. When teachers evaluate each other. Scholastic Magazine, September 1972.
- Acheson, K. H. and Gall, M. D. Techniques in the clinical supervision of teachers. Preservice and inservice application. New York: Longman, Inc., 1980.
- Alberta Teachers' Association. A Cooperative assessment: A manual for teachers. ATA. June 1979.
- Aleamoni, L. M. Typical faculty concerns about student evaluation of instruction. NACTA Journal, 16-21, March 1976.
- Alfonso, J. Will peer supervision work? Educational Leadership, 34(8), May 1977.
- Allen, K. H. and Jarvis, M. E. Analyzing teacher evaluation policies and procedures with case law. Paper presented at the annual meeting of the American Educational Research Association, Quebec, Canada, 1983. ERIC. ED 239 407.
- Allen, S. Accountability revisited. Education Canada, Winter 1980.
- Anderson, G. J. The assessment of learning environments: A manual for the Learning Environment Inventory and the My Class Inventory, 2nd. Ed. Halifax, Nova Scotia: Atlantic Institute of Education, 1973.
- Anderson, R. H. Improving your supervision skills. National Elementary Principal, June 1979.
- Andrews, J. W., Blackman, C. R., and Mackey, J. A. Preservice performance and the national teacher exams. Phi Delta Kappan, January 1980.
- Bailey, G. D. An evaluator's guide to diagnosing and analyzing teaching styles. NASSP Bulletin, February 1984.
- Bailey, G. D. Teacher self-assessment: A means for improving classroom instruction. Analysis and Action Series. Washington, D. C.: National Education Association, 1981.

- Bailey, G. D. Teacher self-assessment: In search of a philosophical foundation. National Association of Secondary School Principals, 62: 64-70, 1978.
- Barnes, S. Synthesis of selected research on teacher findings. Report No. 9009. Austin: Texas Univ. Research and Development Center for Teacher Education, 1981. ERIC ED 223 569.
- Beach, D. M. and Reinhartz, J. What is good teaching? - Using criteria of effective teaching to judge teacher performance. NASSP Bulletin, 68(475): 31-37, 1984.
- Beach, D. M. and Reinhartz, J. Improving instructional effectiveness: A self-assessment procedure. Illinois School Research and Development Journal, Fall 1982.
- Beckham, J. Legal aspects of teacher evaluation. Topeka, Kansas: National Organization on Legal Problems of Education, 1981.
- Beckham, J. C. Guide to teacher evaluation. The Trustee, 52(2): 11-12, Summer 1982.
- Bird, T. and Little, J. W. Finding and founding peer coaching. Paper presented at the Annual Meeting of the American Educational Research Association. Montreal, April 11-15, 1983.
- Blacker, D. A. Focus: Improvement of instruction. The Trustee, 52(2): 3-6, Summer 1982.
- Blake, R. H. Assessment of inquiry competencies in a performance-based teacher education program. Paper presented at the annual meeting of the Northern Rocky Mountain Educational Research Association, Jackson Hole, WY., 1983. ERIC. ED 241 555.
- Blecke, A. E. Encouraging teacher support for teacher evaluations. NASSP Bulletin, 66(458): 16-21, 1983.
- Blumberg, A. Supervisors and teachers: A private cold war. Berkeley, California: McCutchan Publishing Corporation, 1974.
- Bolton, R. People skills: How to assert yourself, listen to others, and resolve conflicts. Englewood, Cliffs, N.J.: Prentice-Hall, Inc., 1979.

- Borich, G. D., et al. Convergent and discriminant validity of five classroom observation systems: Testing a model. Journal of Educational Psychology, 70(2): 119-28, Apr. 1978.
- Borich, G. D. and Madden, S. K. Evaluating classroom instruction: A sourcebook of instruments. Menlo Park, CA.: Addison - Wesley, 1977.
- Boyer, E. G., Simon, A. and Karafin, G. (Eds). Measures of maturation. An anthology of early childhood observation instruments, (3 Volumes). Philadelphia, PA: Research for Better Schools, Inc., 1973.
- Braskamp, L. A., et al. Student ratings and instructor self-ratings and their relationship to student achievement. American Educational Research Journal, 16: 295-306, 1979.
- Bridges, E. M. Improving instruction and Education: Managing the less competent teacher. IFG Policy Perspectives, 1-4, Winter 1984.
- Brophy, J. E. Successful teaching strategies for the inner-city child. Phi Delta Kappan, 63(8): 527-30, Apr. 1982.
- Brophy, J. and Evertson, C. Low inference observational coding measures and teacher effectiveness, 1973. ERIC ED 077 879.
- Brophy, J. E., and Good, T. L. Teacher behavior and student achievement. In M. Wittrock (Ed.), Handbook of research on teaching (3rd. Ed.). New York: Macmillan, 1985.
- Brown, R. D. Helpful and humane teacher evaluation. In W. R. Duckett (Ed.), Teacher evaluation: Gathering and using data. Bloomington, Indiana: Phi Delta Kappa Center on Evaluation, Development and Research, 1983.
- Cangelosi, J. S. Evaluating teaching: A suggestion for principals. NASSP Bulletin, 68(475): 19-23, 1984.
- Cangelosi, J. S. Measurement and evaluation: An inductive approach for teachers. Dubuque, Iowa: W. C. Brown Co., 1982.
- Capie, W., et al. Teacher performance assessment instruments. Athens, Georgia: University of Georgia, School of Education, 1979. ERIC ED 182 518.

- Carey, W. C. Tactful teacher evaluations. A guide for the site administrator. (Finding pleasant ways to say unpleasant things). Salem, Oregon: Options Press, 1983.
- Carey, W. C. Redesigning your teacher evaluation system. A guide for the evaluation committee. Salem, Oregon: Options Press, 1983.
- Carey, W. C. Managing your teacher evaluation system (A video-supported workshop). Salem, Oregon: Options Press, 1982.
- Carey, W. C. The DTD (Documenting teacher dismissal) in-service guide. Salem, Oregon: Options Press, 1982.
- CEDR. Center on Evaluation, Development and Research. Evaluation of teaching: The formative process. Hot Topics Series. Bloomington, IN: Phi Delta Kappa, 1983-84.
- Centra, J. A. (Ed.). Determining faculty effectiveness. San Francisco: Jossey-Bass Publishers, 1980.
- Centra, J. A. (Ed.). Renewing and evaluating teaching. San Francisco: Jossey-Boss, 1977.
- Centra, J. A. and Creech, F. R. The relationship between student, teachers course characteristics and student ratings for teacher effectiveness. Education Testing Service, Project report 76-1. Princeton, N.J., 1976.
- Cheong G. S. C. Student evaluations of instructors: Before and after the examination names vs. anonymous. Journal, 9(1), 1979.
- Chirnside, C. Ten Commandments for successful teacher evaluation. NASSP Bulletin, 68(475): 42-43, 1984.
- Cogan, M. Clinical supervision. Boston: Houghton - Mifflin, 1973.
- Cohen, P. Teacher evaluation in a school system: An overview. Education Canada, 19(3), Fall 1979.
- Cohen, P. A. Synthesizing research results on teacher evaluation using meta-analytic procedures. Paper presented at the annual meeting of the American Psychological Association, Washington, D.C., 1982. ERIC. ED 223 646.

Conran, P.C. and Chase, A. Staff development for success. Illinois School Research and Development, 19(3): 24-29, Spring 1983.

Cromack, T. R. and Egelston, R. L. Students as the source of information concerning teacher behavior: New concepts in the appraisal of instruction. The Journal of Classroom Interaction, Winter 1979.

CTF Teacher evaluation. A CTF Conference Report, Canadian Teachers' Federation, Ottawa, Ontario. September 1982.

Cuccia, N. J. Systematic observation formats: Key to improving communication in evaluation. NASSP Bulletin, February 1984.

Darling-Hammond, L., Wise, A. H., et al. Teacher evaluation in the organizational context: A review of the literature. Review of Educational Research, 53(3), Fall 1983.

Denham, A. Clinical supervision: What we need to know about its potential for improving instruction. Contemporary Education, 49: 33-37, 1977.

Diamond, S. Micro-supervisory experience, humanistic and clinical format. NASSP Bulletin, March 1980.

Duckett, W. R. (Ed.). Observation and the evaluation of teaching. Bloomington, In.: Phi Delta Kappa. A CEDR Monograph, 1980.

Duckett, W. R. (Ed.). Planning for the evaluation of teaching. Bloomington, In.: Phi Delta Kappa. A CEDR Monograph, 1979.

Duckett, W. R. (Ed.). Teacher evaluation: Gathering and using data. Bloomington, In.: Phi Delta Kappa. A CEDR Monograph, 1983.

Du Vall, L. A. An administrator views teacher evaluation. In W. R. Duckett (Ed.), Teacher evaluation: Gathering and using data. CEDR Monograph, Phi Delta Kappa, 1983.

Eash, M. J. and Waxman, H. C. Students' perceptions of effective teaching in different subject areas. Paper presented at the annual meeting of the American Educational Research Association, Boston, 1980. ERIC. ED 191 913.

Eastridge, H. E. Student evaluations and teacher performance. National Association of Secondary School Principals Bulletin, 60: 48-54, 1976.

Ellis, E. C., Smith, J. T., and Abbot Jr., W. H. Peer observation: A means for supervisory acceptance. Educational Leadership, 36(6), March 1979.

Emans, R. Teaching behaviors in reading instruction: A review of the research and critique. Paper presented at the annual meeting of the American Association of Colleges for Teacher Education, Detroit, 1983. ERIC. ED 227 093.

Emmer, E. T. Classroom observation scales, February 1973. ERIC. ED 076 573.

Emmer, E. T., et al. The classroom management improvement study: An experiment in elementary school classrooms. Austin: Texas Univ. Research and Development Center for Teacher Education, 1981. ERIC. ED 226 452.

Erickson, C. M. Education to help people grow. The Trustee, 52(2): 9-11, Summer 1982.

Evertson, C. M., et al. Report of the methodology, rationale, and instrumentation of the junior high classroom organization study. R & D Report No. 6100. Austin: Texas Univ. Research and Development Center for Teacher Education, 1980. ERIC. ED 189 076.

Evertson, C. M. and Anderson, L. M. Interim progress report: The classroom organization study. Correlates of effective teaching. Austin: Texas Univ. Research and Development Center for Teacher Education, 1978. ERIC. ED 167 525.

Eye, G. G. Supervisory skills: The evaluation of the art. Journal of Educational Research, 69:14-19, 1975.

Feldvebel, A. M. Teacher evaluation: Ingredients of a credible model. The Clearinghouse, 53(9): 415-420, 1980.

Fischer, N. A. Evaluating teachers: One principal's way. Principal, 61(5): 37-39, 1982.

Flippo, R. F. and Foster, C. R. Teacher competency testing and its impact on educators. Journal of Teacher Education, 35(2), 1984.

- Fordham, A. The context of teaching and learning in studies of teacher effectiveness. Studies in Educational Evaluation, 8(2): 111-28, 1982.
- Foster, D. C. Selection of evaluation criteria for the development of a teacher assessment system. (Research report No. 84-1). Seattle, WA: Washington University Teacher Education Research Center, 1984. ERIC. ED 242 719.
- Fox, R., et al. Student evaluation of teacher as a measure of teacher behavior and teacher impact on students. Journal of Educational Research, 77(1), Sept/Oct. 1983.
- Fredrick, G. H. Supervision and evaluation - recognizing the difference can increase value, effectiveness. NASSP Bulletin, 68(475): 12-18, 1984.
- Fris, J. Teacher supervision in Burnaby, B. C. The Canadian School Executive, June 1983.
- Georgia Department of Education. Division of Staff Development. Teacher performance assessment instruments. Athens, Georgia: Teacher Assessment Project, College of Education, University of Georgia, 1979.
- Giflin, A., et al. Supervision, reflection and understanding: A case for horizontal evaluation. Journal of Teacher Education, 35(3), May-June 1984.
- Goldhammer, R., Anderson, R. H., and Krajewski, R. J. Clinical supervision: Special methods for the supervision of teachers. (2nd Ed.). New York: Holt, Rinehart and Winston, 1980.
- Goldsberry, L. Another perspective: A response to McFaul and Cooper. Journal of Teacher Education, 35(2), 1984.
- Goldsberry, L. The realities of clinical supervision. Educational Leadership, April 1984.
- Goldstein, W. Supervision made simple. (Fastback 1980). Bloomington, In: Phi Delta Kappa Educational Foundation, 1982. ERIC. ED 225 286.
- Good, T. L. Classroom observation: Potential and problems. In W. R. Duckett (Ed.), Observation and the evaluation of teaching. A CEDR Monograph, Phi Delta Kappa, 1981.

- Gray, F. When evaluating teachers, never violate these 13 rules. The Executive Educator, 18-38, November 1981.
- Grossnickle, D. R. and Cutter, T. W. It takes one to know one - Advocating colleagues as evaluators. NASSP Bulletin, February 1984.
- Guthrie, E. R. The evaluation of teaching: A progress report. Seattle: U. of Washington Press, 1954.
- Haefele, D. L. How to evaluate thee, teacher - Let me count the ways. Phi Delta Kappan, January 1980.
- Haertel, G. D., et al. Psychological models of educational performance. A theoretical synthesis of constructs. Review of Educational Research, 53(1): 75-91, Spring 1983.
- Harris, B. M. Supervisory behavior in education. (3rd. Ed.). Englewood Cliffs, N.J.: Prentice Hall, 1985.
- Hamachek, D. Characteristics of good teachers and implications for teacher education. Phi Delta Kappan, February 1969.
- Hawley, R. C. Assessing teacher performance. Amherst, Mass.: Education Research Associates, 1982.
- Hawley, R. C. Evaluating teaching: A handbook of positive approaches. (4th Ed.). Amherst, Mass: Educational Research Associates, 1980.
- Hawley, R. C. and Hawley, I. L. Achieving better classroom discipline. Amherst, Mass.: Education Research Associates, 1981.
- Heidelback, R. (Ed.). Developing supervisory practice. Washington, DC.: Association of Teacher Educators, 1978.
- Henderson, C. Musical accountability: The measurement of music teacher behaviors. Accentuating the positive, 1974. ERIC. ED 171 637.
- Hiebert, B. Counselor effectiveness: An instructional approach. The Personnel and Guidance Journal, 62(10), June 1984.

- Holdaway, E. A. Practices and policies involved in the formal evaluation of teachers in Alberta. Research Report. Dept. of Ed. Adm., University of Alberta, June 1977.
- Hopfengardner J. and Walker, R. Collegial support: An alternative to principal - led supervision of instruction. NASSP Bulletin, April 1984.
- Hosford, P. and Martin, J. Prospective teacher evaluation via videotape. Journal of the Association of Teacher Educators, II(1):45-48, Winter 1979-80.
- Huitt, W. G. and Segars, J. K. Characteristics of Effective Classrooms. Philadelphia, P.A.: Research for better schools, Inc., 1980. ERIC. ED 207 216.
- Hunter, M. Six types of conference. Educational Leadership, February 1980.
- Hyman, R. T. Testing for teacher competence: The logic, the law and the implications. Journal of Teacher Education, 35(2), 1984.
- Hyman, R. T. School administrator's handbook of teacher supervision and evaluation methods. Englewood Cliffs, N.J.: Prentice-Hall, 1975.
- Information collection. Time leader's guide. Basic skills instructional improvement program. Philadelphia, Pa.: Research for better schools, Inc., 1980. ERIC. ED 193 200.
- Ingle, R. B. Techniques for systematic observation. In W. Duckett (Ed.), Observation and the evaluation of teaching. A CEDR Monograph, Phi Delta Kappa, 1980.
- Iwanicki, E. F. and McEachern, L. Using teacher self-assessment to identify staff development needs. Journal of Teacher Education, 35(2), 1984.
- Iwanicki, E. F. and McEachern, L. Teacher self-improvement: A promising approach to professional development and school improvement. Journal of Staff development, 4(1): 62-77, 1983.
- Johnson, C. Teacher Performance Assessment Instruments (TPAI), 1982.
- Jones, V. An administrators guide to developing and evaluating a building discipline program. NASSP, April 1984.

- Joyce, B. R. Power in staff development through research on training. Alexandria, VA: Association for Supervision and Curriculum Development, 1983.
- Keeler, B. T. Teacher evaluations. ATA Magazine, 60(4): 30, 1980.
- King, R. A. Reliable rating sheets: A key to effective teacher evaluation. National Association of Secondary School Principals Bulletin, 62: 21-26, 1978.
- Kowalski, J. T. S. Evaluating teacher performance. Arlington, Va.: Educational Research Service, 1978.
- Krajewski, R. J. Clinical supervision: A conceptual framework. Journal of Research and Development in Education, 15(2), 38-43, 1982.
- Krajewski, R. J. Clinical supervision: To facilitate teacher self-improvement. Journal of Research and Development in Education, 9(2): 58-66, 1976.
- Kugle, C. L. Data collection procedures for the evaluation of teaching program, Phase II. Technical Report No. 5055. Austin: Texas Univ. Research and Development Center for Teacher education, 1978. ERIC. ED 170 340.
- Kugle, C. L. and Clements, R. O. One good look deserves another: Combining methodologies to describe classrooms. Report No. 5084. Austin: Texas Univ. Research and Development Center for Teacher Education, 1980. ERIC. ED 192 293.
- Kyle, Jr. W. C., et al. Science laboratory interaction categories (SLIC): An instrument to observe and analyze the various parameters of activity-centered and vocational education classrooms. Technical Report 15.
- Lamb, R. W. and Thomas, M. D. The art and science of teacher evaluation. Principal, 61(1), 45-48, 1981.
- Larson, R. Teacher performance evaluation -- What are the key elements? NASSP Bulletin, February 1984.
- Lerch, R. D. The clinical model: The optimum approach to supervision. Clearing-house, 53, January 1980.
- Levin, B. Students evaluating teachers. The Canadian School Executive, June 1983.

MacDonald, F. A report on the results of Phase II of the Beginning Teacher Evaluation Study: The effects of teaching performance on student learning. Paper presented to A.E.R.A., San Francisco, April 1976.

MacKay, D. A. and Osoba, E. C. New directions in teacher supervision. Centre for Research in Teaching, University of Alberta.

MacNaughton, R. H., et al. Effective teacher evaluation - process must be personalized, individualized. NASSP Bulletin, 68(475): 1-11, 1984.

Magoon, A. J. Sensitive field observation of teaching performance. Journal of Teacher Education, 30(2), Mar-April 1979.

Magsino, R. F. Competencies for teaching: Confronting the real priority in Canadian education. Canadian Journal of Education, 4(4), 1979.

Manatt, R. P., et al. Evaluating teacher performance with improved rating scales. NASSP Bulletin, 60(401): 21-24, 1976.

Mangano, N., Rupley, W., and Willson, V. External validity issues associated with classroom observational research. Journal of Classroom Interaction, 19(1).

Marsh, H. W., et al. Validity and usefulness of student evaluations of instructional quality. Journal of Educational Psychology, 67: 833-839, 1975.

McBean, E. A. and Al-Nassri, S. Questionnaire design for student measurement of teaching effectiveness. Higher Education II, 1982.

McConnell, J. W. and Bowers, N. D. A comparison of high-inference and low-inference measures of teacher behaviors as predictors of pupil attitudes and achievements. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979. ERIC. ED 171 780.

McCready, D. J. Student evaluation of teaching. Canadian Journal of Higher Education, VII(2), 1981.

McFaul S. and Cooper J. Peer clinical supervision: Theory vs. reality. Educational Leadership, April 1984.

McGee, J. C. and Eaker, R. Clinical supervision and teacher anxiety: A collegial approach to the problem. Contemporary Education, XLIX(1), Fall 1977.

- McGreal, T. L. Successful teacher evaluation. Alexandria, VA: Association for Supervision and Curriculum Development.
- McGreal, T. L. Developing a teacher evaluation system: Commonalities of these systems that function most effectively. Paper presented at the annual meeting of the Association for Supervision and Curriculum Development, Anaheim, Ca., 1982. ERIC. ED 226 418.
- McIntyre, D. J. A response to the critics of field experience supervision. Journal of Teacher Education, 35(3), May-June 1984.
- Medley, D. M. Teacher competency testing and the teacher educator. Published jointly by the Association of Teacher Educators and the Bureau of Educational Research, University of Virginia, 1982.
- Medley, D. M., Coker H., and Soar, R. S. Measurement-based evaluation of teacher performance. An empirical approach. New York: Longman, Inc., 1984.
- Medley, D., Soar, R., and Coker, H. The minimum conditions for valid evaluation of teacher performance. Journal of Classroom Interaction, 19(1): 22-27, Winter 1983.
- Meeham, M. L. Evaluation of the Stallings classroom management staff development demonstration project in Putnam County, West Virginia. Charleston, W.Va.: Appalachia Educational Lab., 1981. ERIC. ED 225 977.
- Miley, A. Procedures for classroom observations 1973-1974. Technical Report #19. Honolulu: Kamehameha Schools. Kamehameha Early Education Project, 1974. ERIC. ED 158 844.
- Millman, J. (Ed.). Handbook of teacher evaluation. Beverly Hills, California: Sage Publications, 1981.
- Mooney, J. P. A systems supervisory model for principals: Where are we? NASSP Bulletin, February 1984.
- Moore, T. J. and Neal, W. D. The evaluation of teaching performance. The Journal of Educational Administration, VII(2), October 1969.
- Munroe, M. J. Teaching behaviors effective in mainstream classrooms. Paper presented at the annual state conference of the Arizona Federation Council for Exceptional Children, Tucson, 1982. ERIC. ED 213 679.

Nasca, D. and Davis, H. B. Verbal interaction behaviors of teachers of the gifted, 1981. ERIC. ED 216 478.

National Association of Secondary School Principals. Teacher incentives: A strategy for effective educational management. Reston, Va.: NASSP, 1985.

National Education Association, Project on Utilization of Inservice Education R & D Outcomes. The L.E.A.S.T. approach to classroom discipline. Description of inservice education materials, 1978. ERIC. ED 166 143.

National Study of School Evaluation. A self-directed program for developing teacher and administrator evaluation procedures. Falls Church, VA: National Study of School Evaluation, 1984.

Natriello, G. Teachers' perceptions of the frequency of evaluation and assessments of their effort and effectiveness. American Educational Research Journal, 21(3): 579-595, 1984.

Natriello, G. Evaluation frequency, teacher influence and internalization of evaluation processes: A review of six studies using the theory of evaluation and authority. Final report. Eugene, OR: Oregon University, Center for Educational Policy and Management, 1983. ERIC. ED 242 050.

Natriello, G. and Dornbusch, S. M. Pitfalls in the evaluation of teachers by principals. Administrator's Notebook, 29(6), 1980-1981, entire issue.

Ness, M. The administrator as instructional supervisor. Educational Leadership, February 1980.

Newberry, A. A principal's guide to planning supervision. The Canadian School Executive, 4(4): 7-10, October 1984.

Noli, P. A principal implements BTES. Beginning Teacher Evaluation Study News Letter, November 1979.

Noli, P. A principal implements an ALT program. Journal of Classroom Interaction, 17(2), November 1979.

Norris, S. P. Defining observational competence. Science Education, 68(2), 1984.

O'Hanlon, J. and Mortesen, L. Making teacher evaluation work. Journal of Higher Education, 51: 664-671, 1980.

Oliva, P. F. and Henson, K. T. What are the essential generic teaching competencies? Theory into Practice, 19(2): 117-21, Spring 1980.

Oliver, B. Desirable qualities in teacher performance appraisal systems. Teacher Education, 18(3): 26-30, Winter 1982.

Pambookian, H. S. Discrepancy between instructor and student evaluations of instruction: Effect on instructor. Instructor Science, 5: 63-78, 1976.

Pattavina, P. and Ramirez, R. Generic affective teaching competencies, and personal efficacy needs of Hispanic students in public schools. Paper presented at the Council for Exceptional Children Conference on the Exceptional Bilingual Child, New Orleans, 1981. ERIC. ED 207 291.

Peterson, D. Legal and ethical issues of teacher evaluation: A research based approach. Educational Research Quarterly, 7(4): 6-16, 1983.

Peterson, D. and Peterson, K. A research-based approach to teacher evaluation. NASSP Bulletin, February 1984.

Peterson, K. Methodological problems in teacher evaluation. Journal of Research and Development in Education, 17(4): 62-70, 1984.

Peterson, K. and Kauchak, D. Progress on development of lines of evidence for the evaluation of public school teaching. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada, 1983.

Peterson, K. and Kauchak, D. Teacher evaluation: Perspectives, practices and promises. Salt Lake City: Center for Educational Practice, University of Utah, 1982.

Pike, K. Have you disabled a student today. A look at teacher effectiveness. Paper presented at the annual meeting of the International Reading Association, Chicago, 1982. ERIC. ED 216 311.

Pinola, M. Are you an "A" teacher? A short quiz for self evaluation. Education, 102(4), April 1982.

Popham, W. J. Pitfalls and pratfalls of teacher evaluation. Educational Leadership, 141-46, November 1974.

Powell, M. Variable teaching behaviors: The importance of considering context in understanding teaching. Educational Research Quarterly, 4(2): 36-42, Summer 1979.

Prawat, R. S. and Solomon, D. J. Validation of a classroom climate inventory for use at the early elementary level. Education and Psychological Measurement, 41(2), Summer 1981.

Ratsoy, E. W. and Sloan, L. V. Effective teaching as a focus for supervisory activity. Canadian Administrator, 20(7), April 1981.

Reavis, C. A. A convincing case for clinical supervision. The Trustee, 50(1): 19-22, 1980.

Reikie, M. J. Policies and practices used in preparing formal evaluations of teachers in Alberta. Master's thesis, Faculty of Education, University of Alberta, 1977.

Richardson, D. C. and Hatley, R. V. The instrument for the observation of teaching activities (IOTA) and alternative approaches to remediation of teacher weaknesses. The Southern Journal of Educational Research, U. of Southern Mississippi.

Riley, R. D. and Schaffer, E. C. Self-Certification: Accounting to oneself. Journal of Teacher Education, 30(2): 23-26, 1979.

Rohrkemper, M. M. Teacher self-assessment. In D. L. Duke (Ed.), Helping teachers manage classrooms. Alexandria, Virginia: Association for Supervision and Curriculum Development, 1982.

Rosenshine, B. Teaching functions in instructional programs. Paper presented at the National Invitational Conference. "Research on Teachings: Implications for Practice," Warrenton, Va., 1982. ERIC. ED 221 538.

Rosenshine, B. V. and Furst N. Research on teacher performance criteria. In B. Smith, (Ed.), Research in teacher education: A symposium. Englewood Cliffs, New Jersey: Prentice Hall, 1979.

- Ross, V. J. Here's how teachers should be evaluated. The American School Board Journal, August, 25-27, 1981.
- Rothberg, R. A. Helping teachers improve their teaching. Clearinghouse, 53(2), October 1979.
- Rupley, W. H., et al. Identification of reading instructional practices employed by elementary teachers. Paper presented at the annual meeting of the National Reading Conference, Dallas, 1981. ERIC. ED 209 656.
- Sapone, C. V. Appraisal and evaluation systems: Perceptions of administrators, teachers. NASSP Bulletin, 65(442), February 1981.
- Seifert E. and Beck, J. Time-on-Task observations: How principals can improve instruction. NASSP Bulletin, April 1984.
- Sergiovanni, T. J. Professional supervision for professional teachers. Washington, D.C.: Association for Supervision and Curriculum Development, 1975. ERIC. ED 104 886.
- Sergiovanni, T. J. and Starrett, R. J. Supervision: Human perspectives (3rd Ed.) New York: McGraw-Hill, 1983.
- Sergiovanni, T. J. (Ed.). Supervision of teaching: Alexandria, Virginia: Association for Supervision and Curriculum Development, 1982.
- Shavelson, R. and Dempsey - Atwood, N. Generalizability of measures of teaching behavior. Review of Educational Research, 46(4), Fall 1976.
- Simon, A. and Boyer, E. G. (Eds.). Mirrors for behavior III: An anthology of observation instruments. Wyncote, PA.: Communication Materials Center, 1974.
- Simpson, R. H. Teacher self-evaluation. London: MacMillan, 1966.
- Sirotnik, K. A. An inter-observer reliability study of a modified SRI observation system. Journal of Classroom Interaction, 19(1).
- Smith, G. P. The critical issue of excellence and equity in competency testing. Journal of Teacher Education, 35(2), 1984.

Smyth, W. J. Principals role: Teacher evaluation: Rationale, procedures. NASSP Bulletin, March 1980.

Snyder, K. J. Clinical supervision in the 1980s. Educational Leadership, April 1981.

Snyder, K. J. Imperatives in staff training, evaluation, and management. Paper presented at the annual meeting of the American Educational Research Association, Los Angeles, 1981. ERIC. ED 208 588.

Soar, R. S., Medley, D. M., and Coker, H. Teacher evaluation: A critique of currently used methods. Phi Delta Kappan, 65(4), December 1983.

Soar, R. S. and Soar, R. M. Setting variables, classroom interaction, and multiple pupil outcomes. Final Report. Gainesville: Florida Univ. Institute for Development of Human Resources, 1978. ERIC. ED 225 999.

Squires, D. A. Effective schools and classrooms: A research based perspective. Alexandria, VA: Association for Supervision and Curriculum Development, 1983.

Stallings, J. A. Changing teacher behavior: A challenge for the 1980's. Paper presented at the annual meeting of the American Educational Research Association, Los Angeles, 1981. ERIC. ED 200 596.

Stallings, J. A., et al. How to change the process of teaching basic reading skills in secondary schools. Phase II and Phase III. Final Report, Revised Materials. Menlo Park, Calif.: SRI International, 1980. ERIC. ED 210 671.

Stedman, C. H. Testing for competency: A pyrrhic victory? Journal of Teacher Education, 35(2), 1984.

Stier Jr., W. F. Faculty evaluation: A positive approach, April 1982. ERIC. ED 223 119.

Stodolsky, S. S. Teacher evaluation: The limits of looking. Educational Researcher, pp. 11-81, November 1984.

Streich, W. H. The anthropological field method of classroom observation and teaching evaluation. ERIC. ED 243 196.

- Strike, K. A. and Millman, J. Nontechnical questions about teacher evaluation systems in elementary and secondary schools: A research agenda. Educational Evaluation and Policy Analysis, 5(4): 389-397, 1983.
- Sullivan, C. Supervisor expectations and work realities: The great gulf. Educational Leadership, 39, March 1982.
- Sullivan C. G. Clinical supervision. A state of the art review. Alexandria, Virginia: Association for Supervision and Curriculum Development, 1980.
- Sullivan, D. K., et al. Implementation of the Stallings classroom management staff development demonstration Project in Putnom County, West Virginia. Charleston, W. Va.: Appalachia Educational Lab., 1981. ERIC. ED 225 976.
- Sweeney, J. Assessing teachers as humanists and team players. The Trustee, 50(4): 12-13, 1980.
- Sweeney, J. and Manatt, D. A team approach to supervising the marginal teacher. Educational Leadership, April 1984.
- Texas Junior High School Study: Final Report of Process - Outcome Relationships: Classroom Observation Scales. Appendix B. Austin: Texas Univ. Research and Development Center for Teacher Education, 1978. ERIC. ED 173 746.
- Thies - Sprinthall, L. Promoting the developmental growth of supervising teachers: Theory, research programs, and implications. Journal of Teacher Education, 35(3), May-June 1984.
- Thompson, M. L. and Ellis, J. R. Persistent difficulties of teacher evaluation. Illinois School Research and Development, 17(3), Spring 1981.
- Tikunoff, W., Berliner, D., and Rist, R. An ethnographic study of the forty classrooms of the beginning teacher evaluation study known sample. Technical Report No. 75-10-5. San Francisco: Far West Laboratory for Educational Research and Development, 1975.
- Tollefson, N., Wigington, H., and McKnight, P. Course ratings as measures of instructional effectiveness. Instructional Science, 12, 1983.
- Townsend, D. Teacher evaluation in secondary schools. Edmonton, Alberta: Alberta Education, Planning Services, June 1984.

Townsend, D. Teacher evaluation in secondary schools. Summary Report. Edmonton, Alberta: Alberta Education, Planning Services, June 1984.

Tracey, W. R. Teacher evaluation - Another perspective. The Clearinghouse, 51: 240-242, 1978.

Troisi, N. F. Effective teaching and student achievement. Reston, Va.: National Association of Secondary School Principals, 1983. ERIC. ED 231 067. Microfiche.

Tuckmann, B. W., Steber, J. M., and Hyman, R. T. Judging the effectiveness of teaching styles: The perceptions of principals. A paper presented at the annual meeting of the American Educational Research Association. New York, 1977.

Turnbull, G. and Ragsdale, R. G. The analysis of data for teacher performance evaluation, OISE, 1981. Microfiche, National Library, Ottawa.

Tymko, J. L. Performance appraisal: At issue in the 80's. The Trustee, 50(4): 10-11, 1980.

Ulrich, T. Tenure in the teaching profession. No protection for incompetents. Manitoba Teacher, 15-17, December 1984.

Vogt, C. G. Developing a teacher evaluation system. Spectrum, 2(1): 41-46, 1984.

Vukovich, D. and Pfeiffer, I. Self-concept and self-evaluation: What is the relationship? Journal of the Association of Teacher Educators, 11(1): 49-54, Winter 1979-80.

Waimon, M. D., et al. Using product analysis to develop self-improvement skills in CBTE programs, 1979. ERIC. ED. 175 810.

Walberg, J. (Ed.). Evaluating educational performance. Berkeley, California: McCutchan Publishing Corporation, 1974.

Ward, B. A., et al. An expanded view of the student outcomes that are built or restrained by teaching processes and structures. San Francisco: Far West Lab. for Educational Research and Development, 1981. ERIC. ED 223 585.

- Waxman, H. C. Evaluating teachers by alternate distribution criteria. Education, 104(3): 305-310, 1984.
- Weinrott, M. R., et al. Convergent and discriminant validity of five classroom observation systems: A secondary analysis. Journal of Educational Psychology, 73(5): 671-80, Oct. 1981.
- Weinstein, C. S. and Woolfolk, A. E. Impression formation and classroom design: The impact of spatial arrangement and neatness on judgements of teachers. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979. ERIC. ED 172 177.
- Weller, L. D. Teacher performance assessment instruments: A "personalized" approach to staff development. The Teacher Educator, 18(2), Autumn 1982.
- Wise, A. E. and Darling-Hammond, L. Teacher evaluation and teacher professionalism. Educational Leadership, 42(4): 28-33, Dec.-Jan. 1984-85.
- Wise, A. E., et al. Teacher evaluation. A study of effective practices. Santa Monica, CA: Rand, 1984.
- Worksham, M. E. Student accountability for written work in junior high school classes. Austin: Texas Univ. Research and Development Center for Teacher Education, 1981. ERIC. ED 203 387.
- Worthen, R. and Sanders, J. R. Educational evaluation: Theory and practice. Blemont, California: Wadsworth Publishing Company, Inc., 1973.
- Zirkel, P. A. Teacher evaluation: A legal overview. The Journal of the Association of Teacher Educators, II(1): 17-26, Winter 1979-80.

References

GENERAL

- Abrell, R. Preventing communications breakdown. NASSP Bulletin, April 1985.
- Alberta Education. Policy/Program monitoring handbook. Special Needs Programs. Edmonton: Alberta Education, 1985.
- Alberta Education. Program policy manual. Edmonton: Alberta Education, 1985.
- Alberta Education. The goals of basic education for Alberta, 1978. A document prepared by the Curriculum Policies Board. Edmonton: Alberta Education, 1977 (E. A. Torgunrud). Adopted by the Alberta Legislature, May 18, 1978.
- Alexander, L. Master teachers in Tennessee schools. The Education Digest, May 1984.
- Amidon, E. and Hunter, E. Improving teaching: The analysis of classroom verbal interaction. New York: Holt, Rinehart and Winston, 1966.
- Averch, H. A., et al. How effective is schooling? A critical review and synthesis of research findings. Santa Monica, Cal.: Rand Cooperation, 1972.
- Benham, B. J., Giesen, P., and Oakes, J. A study of schooling: Student's experiences in schools. Phi Delta Kappan, January 1980.
- Bereiter, C. and Engleman, S. Teaching disadvantaged children in the preschool. Englewood Cliffs, N.J.: Prentice-Hall, 1966.
- Berliner, D. Tempus educare. In P. L. Peterson and H. J. Walberg (Eds.), Research in teaching: Concepts, findings and implications. Berkeley, CA.: McCutchan, 1979.
- Block, J. Mastery learning: Theory and practice. New York: Holt, Rinehart and Winston, 1971.
- Bloom, B. S. Human characteristics and school learning. New York: McGraw-Hill, 1976.

- Borko, H., Cone, R., Runo, N., and Shavelson, R. Teachers' decision making. In P. Peterson and M. Walberg (Eds.), Research on teaching: Concepts, findings, and implications. Berkeley, CA.: McCutchan, 1979.
- Brown, T. F. Improving school climate. The symptom vs. the problem. NASSP Bulletin, 68(472), May 1984.
- Coleman, J. S., et al. (Eds.). Equality of educational opportunity, (2 Vols). Office of Education, U.S. Dept. of Health, Education Welfare. Washington, D.C.: U.S. Government Printing Office, 1966.
- Cooley, W. W. and Lohnes, P. R. Evaluation research in education. New York: Irvington, 1976.
- Cronbach, L. H. and Snow, R. E. Aptitudes and instructional methods: A handbook for research on interactions. New York: Irvington, 1977.
- Dunkin, M. and Biddle, B. The study of teaching. New York: Holt, Rinehart, Winston, 1974.
- Ficholtz, R. L. School climate: Key to excellence. American Education, 20(1), Jan/February 1984.
- Fedigan, L. School-based elements related to achievement: A review of the literature. Edmonton: Planning and Research Branch, Alberta Education, Fall 1978.
- Gage, N. The scientific basis of the art of teaching. N.Y: Teachers College Press, 1978.
- Gay, G. R. Elements related to student success in schooling and education. A paper presented for the consideration of the Minister's Advisory Committee on Student Achievement (MACOSA). Edmonton: Alberta Education, 1979.
- Gilman, F. Student attitudes and classroom climate: A survey of recent literature. Journal of Classroom Interaction, 19(1), Winter 1983.
- Glass, G. The wisdom of scientific inquiry on education. Journal of Research in Science Teaching, 9, 1972.
- Goodland, J. A place called school. New York: McGraw Hill, 1983.

- Government of Alaska, Department of Education, Governor's Task Force on Effective Schooling. Effective schooling practices. Order No. 64, Sept. 1, 1981. Issued by the Honorable J. S. Hammond.
- Hodgson, E. The Keegstra mess: An administrative report card. The Canadian School Executive, 3(9), March 1984.
- Hosford, P. L. (Ed.). Using what we know about teaching. Alexandria, VA: Association for Supervision and Curriculum Development, 1984.
- Houston, W. R. and Howsam, R. B. (Eds.). Competency - based teacher education. Chicago: SRA, 1972.
- Hunter, M. The teaching process. In D. W. Allen and E. Seifman (Eds.), The teacher's handbook. Glenview, Illinois: Scott, Foresman and Company, 1971.
- Jenkins, A. Effective school climate. A review of the literature and a description of instruments for assessing school climate. A report prepared for Fort McMurray S. D. No. 2833. August, 1983. Alberta Education: Planning Services.
- Mitchell, D. E. and Kerchner, C. T. Collective bargaining and teacher policy. In L. S. Shulman and G. Sykes (Eds.), Handbook of teaching and policy, New York: Longman, 1983.
- Peterson, P. L. and Walberg, H. J. (Eds.). Research on teaching: Concepts, findings, and implications. Berkeley, CA: McCutchan Publishing Corp., 1979.
- PREP. Department of Health, Education and Welfare. Office of Education, National Center for Ed. Communication, Washington, D. C., n.d.
- Rabben, K. State assessment program criticism subsided when educators found it led to improvement. ASCO Update, 23(2), March 1981.
- Raina, M. Education of the left and the right. In Len Fernig (Ed.), The last twenty-five years in education: A record and an evaluation. International Review of Education, UNESCO Institute for Education, Hamburg XXV (2 Jubilee No.) 1979, Martinus Nijhoff, Pub., The Hague, Netherlands.
- Rancourt, R. and Dionne, J. P. A study of the teaching and learning styles in Ontario schools. Ontario: University of Ottawa, 1981.

- Reid, K. and Avalo, S. B. Differences between the views of teachers and students to aspects of sixth form organization of three contrasting comprehensive schools in South Wales. Educational Studies, 6(3), October 1980.
- Ruddy, S. G. Job related stress and burnout in teaching: An exploration. Applying Research in the Classroom, 2(1), Spring 1984.
- Schmidt, S. Schools can make a difference. American Educator, 3(4), Winter 1979.
- Sedgewick, K. H., Hill, R. J., and Russell, T. L. Training teachers in observational skills to improve their judgements of student achievement: A pilot study. Paper presented at the annual meeting of the American Educational Research Association, Boston, April 1980.
- Shapson, S. M., et al. An experimental study of the effects of class size. American Educational Research Journal, 17(2), Spring 1980.
- Shavelson, R. J. and Stern P. Research on teachers' pedagogical thoughts, judgements, decisions and behavior. Review of Educational Research, 51(4), Winter 1981.
- Talbert, J. School organization and institutional changes: Exchange and power in loosely coupled systems. Stanford, Calif.: Institute for Research on Educational Finance and Governance, Stanford University, 1980.
- Van Dyke, H. T. Corporal punishment in our schools. Clearinghouse, 57(7), March 1984.
- Webb, G. An evaluation of techniques for analysing small group work. Programmed Learning and Educational Technology, 18(2): 64-66, May 1981.
- White, D. S. Can merit pay work in education? American Educator, Winter 1983.
- Wildavsky, A. Speaking truth to power: The art and craft of policy analysis, Boston: Little, Brown and Company, 1980.
- Wiles, K. and Lovell, J. T. Supervision for better schools. Englewood Cliffs, N.J.: Prentice Hall, 1967.
- Wilhelms, F. T. Supervision in a new key. Washington, D.C.: Association for Supervision and Curriculum Development, 1973.

Wreggitt, M. The principal's role in fostering excellence in instruction. B.C. Teacher, 26-30, February/March 1985.

Zaltman, G. and Duncan, R. Strategies for planned change. New York: John Wiley and Sons, 1977.

Appendix 1

GOALS OF SCHOOLING
AND
GOALS OF EDUCATION

Appendix I (a)

GOALS OF SCHOOLING

Schooling, as part of education, accepts primary and distinctive responsibility for specific goals basic to the broader goals of education. Programs and activities shall be planned, taught, and evaluated on the basis of these specific goals in order that students:

1. Develop competencies in reading, writing, speaking, listening and viewing.
2. Acquire basic knowledge and develop skills and attitudes in mathematics, the practical and fine arts, the sciences, and the social studies (including history and geography), with appropriate local, national, and international emphasis in each.
3. Develop the learning skills of finding, organizing, analyzing and applying information in a critical and objective manner.
4. Acquire knowledge and develop skills, attitudes and habits which contribute to physical, and social well-being.
5. Develop an understanding of the meaning, responsibilities, and benefits of active citizenship at the local, national, and international levels.
6. Acquire knowledge and develop skills, attitudes, and habits required to respond to the opportunities and expectations of the world of work.

Because the above goals are highly interrelated, each complementing and reinforcing the others, priority ranking among them is not suggested. It is recognized that in sequencing learning activities for students some goals are emphasized earlier than others; however, in relation to the total years of schooling, they are of equal importance.

In working toward the attainment of its goals, the school will strive for excellence. However, the degree of individual achievement also depends on student ability and motivation as well as support from the home. Completion of diploma requirements is expected to provide the graduate with basic preparations for lifelong learning. Dependent on program choices, the diploma also enables job entry or further formal study.

FROM: The Goals of Basic Education for Alberta, 1978.
A document prepared by the Curriculum Policies Board, Edmonton:
Alberta Education, 1977 (E.A. Torgunrud). Adopted by the Alberta
Legislature, May 18, 1978.

Appendix I (b)

GOALS OF EDUCATION

Achievement of the broader goals of education must be viewed as a shared responsibility of the community. Maximum learning occurs when the efforts and expectations of various agencies affecting children complement each other. Recognizing the learning that has or has not occurred through various community influences, among which the home is most important, the school will strive to:

1. Develop intellectual curiosity and desire for lifelong learning.
2. Develop the ability to get along with people of varying backgrounds, beliefs and lifestyles.
3. Develop a sense of community responsibility which embraces respect for law and authority, public and private property, and the rights of others.
4. Develop self-discipline, self-understanding, and a positive self-concept through realistic appraisal of one's capabilities and limitations.
5. Develop an appreciation for tradition and the ability to understand and respond to change as it occurs in personal life and in society.
6. Develop skills for effective utilization of financial resources and leisure time and for constructive involvement in community endeavors.
7. Develop an appreciation for the role of the family in society.
8. Develop an interest in cultural and recreational pursuits.
9. Develop a commitment to the careful use of natural resources and to the preservation and improvement of the physical environment.
10. Develop a sense of purpose in life and ethical or spiritual values which respect the worth of the individual, justice, fair play and fundamental rights, responsibilities and freedoms.

The ultimate aim of education is to develop the abilities of the individual in order that he might fulfill his personal aspirations while making a positive contribution to the society.

FROM: The Goals of Basic Education for Alberta, 1978.
A document prepared by the Curriculum Policies Branch, Edmonton:
Alberta Education, 1977 (E.A. Torgunrud). Adopted by the Alberta
Legislature, May 18, 1978.

Appendix I (c)

THE GOALS* OF SCHOOLING AND EDUCATION CLASSIFIED ACCORDING
TO THE FOUR DOMAINS OF THE OUTCOMES OF EDUCATION

GOALS	OUTCOMES OF EDUCATION			
	Cognitive	Affective	Process	Psychomotor
Goals of Schooling	1	(1)**	(1)	(1)
	2	2	(2)	(2)
	(3)	3	3	
	4	4	4	4
	(5)	5	(5)	
	6	6	6	6
Goals of Education	(1)	1	(1)	
	(2)	2	(2)	
	(3)	3	(3)	
	(4)	4	(4)	(4)
	(5)	(5)	5	
	6	(6)	(6)	(6)
	(7)	7	(7)	
	8	8		
	9	9	(9)	
	(10)	10	(10)	

* From, The Goals of Basic Education for Alberta, 1978.

** Parentheses indicate the goal is less applicable for that particular Outcome Category.

NOTE: the number of goals in each of the Outcome categories. When several regional office consultants were asked to categorize the goals a remarkable consistency of opinion occurred.

FROM: Elements Related to Student Success in Schooling and Education.
A paper presented for the consideration of the Minister's Advisory Committee on Student Achievement (MACOSA) by Dr. Gary R. Gay, Edmonton: Alberta Education, 1979.

Appendix 1 (d)

OUTCOMES OF EDUCATION: FOUR DOMAINS AND
INDICATORS USED IN THEIR MEASUREMENT

DOMAIN	INDICATORS
Cognitive	1. I.Q. scores 2. Grade point average (achievement) 3. Reading scores 4. Math scores 5. Achievement growth 6. Verbal scores 7. Reasoning (mechanical, abstract) 8. Vocational development
Affective	1. Satisfaction 2. Creativity 3. Self-concept 6. Academic interest and aspiration 5. Citizenship 4. Attitude towards school and learning 7. Motivation 8. Attendance
Process	1. Inquiry or investigation skills
Psychomotor	

FROM: Elements Related to Student Success in Schooling and Education.
A paper presented for the consideration of the Minister's Advisory
Committee on Student Achievement (MACOSA) by Dr. Gary R. Gay,
Edmonton: Alberta Education, 1978.

Appendix 2

**A DESCRIPTION OF THE 30 VIDEOTAPES PRODUCED
BY DR. L. MIREAU FOR ALBERTA EDUCATION**

**VIDEOTAPES
FOR
EVALUATING AND IMPROVING TEACHING PERFORMANCE**

This set of thirty videotapes has been produced by Dr. Laurie Mireau for Alberta Education as part of an administrator training package entitled Evaluating and Improving Teaching Performance: Inservice Kit. They are intended to be used in conjunction with a printed text, preferably in a group in-service setting. Basic information and classroom examples are presented in some of the tapes while other tapes of classroom instruction are to be used for coding practice by administrators who are fine-tuning their classroom observation and evaluation skills.

Sets of videotapes may be purchased from the School Book Branch, Alberta Education, 10410 - 121 Street, Edmonton, Alberta T5N 1L2 (Phone 403/427-2767). Purchase order forms should specify the following: number of sets, title (Evaluating and Improving Teaching Performance: Inservice Kit), format (either ½ inch VHS or Beta), and Attention: Mr. Ralph Goddard. The price of \$400.00 per set includes containers and shipping.

Copyright 1985 Alberta Education, Edmonton.

The text of Evaluating and Improving Teaching Performance: Inservice Kit and the accompanying thirty videotapes may not be reproduced for sales purposes.

VIDEOTAPES

45 to 60 Minutes Each

CHAPTER ONE, TAPE NO. 1-1 Accession Number: _____

INTRODUCTORY TAPE

Dr. Laurie Mireau reviews some promising classroom research trends which have yielded promising directions for supervisors of instruction. The role of the supervisor, particularly as a classroom observer, is considered in detail. Characteristics of the effective classroom observer and some "Do's and Don't's" of observation and conferencing are also presented.

CHAPTER ONE, TAPE NO. 1-2 Accession Number: _____

TEST TAPE

Before working through the activities in the entire kit, administrators are requested to view this 15-minute segment of classroom teaching and to prepare a set of formal statements about what was observed. This exercise is to be repeated after working through the kit. Heather Lynn, a Grade 2-3 teacher, demonstrates language arts activities.

CHAPTER ONE, TAPE NO. 1-3 Accession Number: _____

THE B CONFERENCE

Elizabeth Harrison, a Teacher Effectiveness Consultant, and Heather Lynn, Grade 2-3 teacher, model both an A Conference (reinforcing the teacher on the effective use of a particular skill) and a B Conference (generating alternatives together for the use of the same skill in a future lesson).

CHAPTER ONE, TAPE NO. 1-4 Accession Number: _____

THE C CONFERENCE

Elizabeth Harrison, a Teacher Effectiveness Consultant, and Merv Tuplin, Junior High School teacher, model both an A Conference (in which the teacher is reinforced for the effective use of a particular skill) and a C Conference (in which the teacher requests assistance with the implementation of a different skill and they jointly develop ways of using this skill in a future lesson).

CHAPTER ONE, TAPE NO. 1-5 Accession Number: _____

CONFERENCING WITH A TEACHER IN DIFFICULTY

Peter Carstensen and Susan McKenzie, Instructional Processes Consultants, demonstrate approaches recommended for conferencing with teachers experiencing problems. At intervals they explain the rationale behind the particular procedures and counselling techniques they are using and they role-play several conferences occurring between a supervisor and a teacher.

CHAPTER TWO, TAPE NO. 2-1 Accession Number: _____

OBSERVING CLASSROOM MANAGEMENT SKILLS

Dr. Laurie Mireau examines the pertinent aspects of many classroom management skills and supplements each explanation with illustrative video clips taken from lessons taught in eleven public school classrooms.

CHAPTER TWO, TAPE NO. 2-2 Accession Number: _____

THE POWER STRUGGLE

Glen Haug, Teacher Effectiveness Consultant, demonstrates what to do and say when engaged in a power struggle with a student. Vignettes have been role-played with seven high school students and Glen debriefs the methods used at various points in the video tape.

CHAPTER THREE, TAPES NO. 3-1 AND 3-2 Accession Numbers: _____ and _____

OBSERVING INSTRUCTIONAL SKILLS

Dr. Laurie Mireau explains the main characteristics and rationale for the use of many classroom instructional skills. Each explanation is accompanied by several examples chosen from the videotaped lessons of eleven classroom teachers.

CHAPTER THREE, TAPES NO. 3-3 and 3-4 Accession Numbers: _____ and _____

STUDENT ENGAGED TIME A AND B

These two tapes each contain three segments of classroom teaching focusing on two students for approximately 15 minutes. The tapes afford the observer the opportunity of coding "student engaged time" and assessing the percentage of on-task behavior in a variety of classroom settings.

CHAPTER FOUR, TAPE NO. 4-1 Accession Number: _____

OBSERVING VERBAL INTERACTION SKILLS

Dr. Laurie Mireau highlights verbal skills used in questioning students and in reacting to their response efforts. Examples of these skills in use have been selected from the videotaped lessons of eleven classroom teachers in Edmonton Public Schools.

CHAPTER FIVE, TAPE NO. 5-1 Accession Number: _____

OBSERVING INTERPERSONAL SKILLS

Dr. Laurie Mireau briefly describes selected interpersonal skills and presents examples of these skills as demonstrated by the eleven teachers who were videotaped during classroom instruction.

CHAPTER FIVE, TAPE NO. 5-2 Accession Number: _____

TEACHER HANDLING OF CONTROVERSIAL ISSUES

One lesson is included in this tape showing how class discussions on controversial issues might be handled.

CHAPTER SIX, TAPE NO. 6-1 Accession Number: _____

GRADE 11 BIOLOGY

Peter Harris, Biology 20. Following a field trip to the Saskatchewan River bank, Peter provides his students with additional background information on pollution control measures used by the City to monitor the amount of pollution in the river.

CHAPTER SIX, TAPE NO. 6-2 Accession Number: _____

GRADE 11 MATHEMATICS

Marilyn Nicholas, Math 30. Marilyn presents the binomial theorem to her class and assists them in understanding the derivation of the formula and in using it to solve equations.

CHAPTER SIX, TAPE NO. 6-3 Accession Number: _____

GRADE 1

Faye Kay. Faye's students begin the day by working independently, under her close supervision, on several language arts tasks before participating in a lesson addressed to the whole class.

CHAPTER SIX, TAPE NO. 6-4 Accession Number: _____

GRADE 5-6

Jim Johnson. Jim begins the afternoon with a class discussion combining the topics of peer pressure and problem-solving after which the class moves on to a creative composition period.

CHAPTER SIX, TAPE NO. 6-5 Accession Number: _____

GRADE 12

Ted Thresher, Math 33. Ted reviews quiz questions on quadratic functions with the class and then moves on to teach the formal procedures to be used when solving equations using complex numbers.

CHAPTER SIX, TAPE NO. 6-6 Accession Number: _____

GRADE 10

Denise Tremblay, French 10. Denise reviews the verb conjugations of *etre* and *avoir* in a game and then teaches how to use these verbs to form the *passe compose tense*. The class is conducted in French.

CHAPTER SIX, TAPE NO. 6-7 Accession Number: _____

GRADE 8

Ric Rosborough, Science. Ric conducts an oral review of the concepts studied in the last science unit in preparation for the end of the year exam.

CHAPTER SIX, TAPE NO. 6-8 Accession Number: _____

GRADE 7 ART

Ron Wigglesworth, Art. Ron assists his students to sharpen their observation skills through a series of exercises. After a surprise visit by two "creatures" the class is asked to draw what they have been able to observe.

CHAPTER SIX, TAPE NO. 6-9 Accession Number: _____

GRADE 7 MATH

Merv Tuplin, Mathematics. Merv assists students in locating the variable in English story problems and in translating these problem statements into accurate mathematical equations.

CHAPTER SIX, TAPE NO. 6-10 Accession Number: _____

GRADE 2-3

Heather Lynn. Heather works with the Grade Two's to review the use of the long and the short hand in telling time and the students are given a worksheet to complete while Heather works with the Grade Three's on three-digit addition.

CHAPTER SIX, TAPE NO. 6-11 Accession Number: _____

GRADE ONE

Helen Mills. Helen reviews spelling words with the class and assists them in completing an exercise sheet using these words. Helen reads them an animal poem and the students then modify the poem by inserting their favorite animal instead.

PRACTICE KIT INSTRUCTION BOOKLET

Five additional videotapes are described in the instruction booklet which follows. They are designed to provide practice in the observing, recording and evaluating skills which were addressed in the preceding set of videotapes. The editor provides an introduction and preview information at the beginning of each tape. A review of the skills observed is provided at the end. Otherwise, uninterrupted classroom instruction is portrayed in lessons lasting about 30 minutes.

PLANNING FOR AN EVALUATION OF TEACHING PERFORMANCE

Practice Kit

Instruction Booklet

PLANNING FOR AN EVALUATION OF TEACHING PERFORMANCE

Practice Kit Instruction Booklet

Table of Contents

Criteria Chart and Descriptions (Chart A)	2
Videotape Numbers and Contents (Chart B)	5
Introduction	6
Tape 1	7
Tape 2	8
Tape 3	9
Tape 4	11
Tape 5	13

Chart A

Criteria Number	Criteria Name	Criteria Description
1.	Plans, Organization, and Implementation	Arrangements and procedures worked out in advance of instruction by the teacher and the extent to which these are appropriate and used.
2.	Academic Learning Time	The time a student is engaged with instructional materials or activities that allow a high level of success for that student.
3.	Teacher's Expectations	The appropriateness of the teacher's predictions of the individual's or group's achievements in a particular content area.
4.	Teacher's Awareness	Alertness to pupil behavior at all times; "withitness," having "eyes in the back of one's head" (Kounin, 1970).
5.	Concurrent Tasks Management	The efficiency and ease with which a teacher handles various classroom activities at the same time.
6.	Pace of Instruction	The rate at which learning experiences are provided for pupils by the teacher.
7.	Classroom Management	The teacher's facility to anticipate, prevent and deal satisfactorily with pupils' interpersonal and academic difficulties. Success in appropriately disciplining pupils.

Criteria Number	Criteria Name	Criteria Description
8.	Feedback to Pupils	Verbal and non-verbal responses to students.
9.	Time on Task	Engaged time; the time a student is attending to instruction in a particular content area.
10.	Enthusiasm	Teacher's display of eagerness and zeal.
11.	Clarity of Instruction	The communication of the teacher is such that the students are totally informed about what they should be doing, where to do it, and for how long, in order to ensure that students do not lose time because they are confused or because they are waiting for decisions to be made.
12.	Task Oriented/ Businesslike Orientation	The degree of academic focus and the teacher's directness in providing academically focussed instruction.
13.	Variability of Instruction	The appropriate use of variety in providing learning experiences for pupils.
14.	Flexibility	The ease with which the teacher adapts and adjusts satisfactorily to varying factors in the classroom setting.
15.	Understanding of Instructional Goals	The pupils' comprehension about what they should be doing, where to do it, and for how long.

**Criteria
Number**

**Criteria
Name**

Criteria Description

-
- | | | |
|-----|------------------------------------|---|
| 16. | Teacher Centred/Direct Instruction | "An instructional strategy where time spent on instruction is sufficient and continuous, content covered is extensive, goals are clear to students, materials are structured and sequential, questions are low level to produce many correct student responses, student progress is monitored, feedback is immediate and correct responses are reinforced. With direct instruction, the teacher sets the goals, plans the activities, chooses the material; questions are convergent, not divergent; interaction is structured, not authoritarian; tasks are cognitive oriented, not humanistic" (Ornstein, 1984: 343). |
| 17. | Praise and Encouragement/Criticism | The appropriate use of positive (e.g., praise and encouragement) and negative (e.g., criticism) reinforcement methods. |
| 18. | Individualization of Instruction | Teaching adapted to the background, ability, and needs of individual learners. |
| 19. | Questioning Techniques | Matching the types of questions asked of the student to the characteristics of the student and to the instructional objectives. |

Chart B

Videotape Numbers and Contents

Videotape Number	Lesson	Grade Level	Subject	Counter Footage	Time
1	A	Junior High School	Social Studies	000	000
	B	High School	Statistics		18:34
2	A	High School	French	000	000
	B	Grade 2/3	Language Arts		31:20
3	A	High School	Mathematics	000	000
	B	Junior High School	Calligraphy		14:30
	C	Junior High School	Mathematics		29:38
4	A	Junior High School	Art	000	000
	B	Grade 1	Mathematics		17:55
5	A	Grade 1	Math/L. Arts	000	000
	B	Grade 1	Language Arts		27:30

Introduction

Purpose: To present eleven edited lessons for evaluators to practice identifying and/or recording observable teaching behaviors.

This practice kit consists of five videotapes of eleven edited lessons ranging from grade one through high school, along with an Instruction Booklet. These materials were developed by Alberta Education, Planning Services Branch, in conjunction with a four volume publication: Planning for an Evaluation of Teaching Performance, and the Initiation to Teaching Project. A training kit consisting of videotapes and text, to be used before the practice kit, is also available. The text, Planning for an Evaluation of Teaching Performance, Volumes I, II, III and IV, will be made available to every school jurisdiction in the province.

The nineteen criteria upon which the kit is based (Chart A) are teaching behaviors that have shown through numerous empirical studies to correlate to student achievement. A more complete explanation of the criteria selected is to be found in Planning for an Evaluation of Teaching Performance, Volume I.

Each lesson in the kit is an edited version of an actual classroom situation. Care was taken to retain the continuity of the lesson as intended by the teacher. Before some lessons teachers and/or students were asked to role-play certain behaviors in order to present outcomes helpful to the user of these practice videotapes.

A brief introduction precedes each lesson and specifies observable behaviors from Chart A that will be found in the teaching performance. Suggestions for use of the practice videotapes follow:

1. Teaching performance supervisors: Superintendents, principals, assistant principals and other formal evaluators, either individually or in groups, may employ this practice kit:
 - to identify specific teacher behaviors that contribute to effective teaching
 - to record teacher performance on locally developed, or otherwise obtained, instruments
 - to improve recorder reliability by practising and then comparing data collected in small groups
 - to assist in selecting or developing instrumentation
 - to determine the usefulness and type of information an instrument offers
 - to discover possible personal biases and assumptions about effective teaching behaviors
2. Teacher self-evaluation: Individual teachers may find the practice tapes useful in appraising their own teaching performance for the following purposes:
 - to identify specific effective teaching behaviors
 - to analyse personal performance in relation to the effective teaching behaviors presented in each lesson
 - to assess the impact of skills presently in use
 - to assist in detecting and solving problem teaching patterns
 - to stimulate variations in teaching behaviors
 - to assist in the peer evaluation process

Tape 1: 35:52 minutes

Accession Number: _____

Lesson 1A: Junior High School - Social Studies (Grade 9)
(18:34 minutes)

3/4 _____
VHS _____
Yours _____

Clarity of Instruction
Plans, Organization and Implementation
Classroom Management
Pace of Instruction
Enthusiasm

A student role plays during part of this lesson on Russian history to show some helpful classroom management strategies used by the teacher, such as, low key verbal techniques and direct discipline. Ron approaches the student on several occasions asking him to behave appropriately. When the disruptive behavior occurs for the fourth time, Ron asks Mike to leave the room to return only when he is ready to behave as accepted by the teacher. Ron uses a variety of teaching aids such as the trough, sponges and the ship which indicate lesson planning and organization of materials were present. The lesson objectives, review and new material are clearly delivered by the teacher to facilitate student understanding of goals and objectives. After lecturing on Peter the Great, Ron asks pupils to make their own notes which acts as a check for the teacher regarding his instructional pace and also assists in making students accountable for the material presented.

Accession Number: _____

Lesson 1B: High School - Statistics (Grade 12)
(17:18 minutes)

3/4 _____
VHS _____
Yours _____

Clarity of Instruction
Academic Learning Time
Pace of Instruction
Praise and Encouragement/Criticism
Task Oriented/Businesslike Orientation

This lesson on the use of Z-scores is delivered in a businesslike, direct manner. Marilyn offers praise and encouragement to individual students as she monitors seatwork. Clear delivery of lesson content through the use of examples and board work, as well as assigning related questions maximize academic learning time.

Tape 2: 47:10 minutes

Accession Number: _____

Lesson 2A: High School French (Grade 10)
(31:20 minutes)

3/4" _____
VHS _____
Yours _____

**Questioning Techniques
Classroom Management
Enthusiasm
Academic Learning Time
Teacher's Awareness
Feedback to Pupils**

This high school French lesson on the verb tense "passé composé" offers numerous effective teaching behaviors. Denise employs low key classroom management strategies as she calls upon students to respond to her questions. Her continuous and enthusiastic verbal feedback to pupils assists in maintaining their attention and thus teacher control. Denise's movement around the U-shaped seating arrangement facilitates her awareness of student behavior.

Accession Number: _____

Lesson 2B: Grades 2/3 -Language Arts
(15:50 minutes)

3/4" _____
VHS _____
Yours _____

**Clarity of Instruction
Concurrent Tasks Management
Individualization of Instruction
Classroom Management
Enthusiasm**

This teacher begins by clearly introducing the upcoming events of the morning, and then specifies the objectives of this particular lesson. Heather employs a variety of low key classroom management strategies such as eye contact, hand gestures, touching, and calling out names of inattentive students to focus pupils' attention back on task. She displays concurrent tasks management as she corrects students' spelling and monitors classroom behavior in this split grade 2/3 class.

Tape 3: 51:30 minutes

Accession Number: _____

Lesson 3A: High School - Mathematics (Grade 12)
(14:30 minutes)

3/4" _____ 000
VHS _____
Yours _____

Clarity of Instruction
Teacher's Expectations
Academic Learning Time
Teacher Centered/Direct Instruction
Praise and Encouragement/Criticism

Numerous effective teaching strategies are employed by this high school mathematics teacher. Ted uses direct instruction to clearly outline the unit objectives and lesson objectives and to review past work. He reviews and teaches new material by calling upon students to respond to questions from the board. Lecture, questioning and seatwork provide academic learning time for student understanding of course material. The teacher praises and encourages students as he moves around the classroom and at one point criticizes a student's work and compares those efforts to another student's - reinforcing the high expectations he has for student work.

Accession Number: _____

Lesson 3B: Junior High - Calligraphy (Grade 7)
(15:08 minutes)

3/4" _____
VHS _____
Yours _____

Teacher Expectations
Classroom Management
Individualization of Instruction
Feedback to Pupils
Questioning Techniques

A brief reading period precedes the calligraphy class on this videotape. The low key classroom management strategy of teaching rules, routines and procedures appears to be in effect as this lesson progresses. Pupils know that they will be asked to recall announcements; they know the day begins with a reading period during which some students will be asked to give a summary of their book. The teacher's expectations are relayed to the students in the calligraphy class during the introduction of lesson objectives and again while he assists individual students as they complete their letters. Merv employs questioning techniques with pauses to handle the review.

Accession Number: _____

Lesson 3C: Junior High - Mathematics (Grade 7)
(21:52 minutes)

3/4" _____
VHS _____
Yours _____

Classroom Management
Task Oriented/Businesslike Orientation
Pace of Instruction
Questioning Techniques
Praise and Encouragement/Criticism
Time-on-Task

The teacher greets students at the door which is a classroom management strategy that can defuse problem behavior and make students feel welcome. Merv uses a quiz at the beginning of this lesson to review past material. Correcting homework also acts as a review. Examples of assisting students to correctly answer homework questions are displayed. Students are allowed time to complete tasks assigned.

Tape 4: 30:25 minutes

Accession Number: _____

Lesson 4A: Junior High - Art (Grade 7)
(17:55 minutes)

3/4" _____
VHS _____
Yours _____

Plans, Organization and Implementation
Praise and Encouragement/Criticism
Individualization of Instruction
Variability of Instruction
Enthusiasm

This teacher has planned and organized this lesson as evident in his introduction of new material and lesson objectives. Ron uses praise, encouragement and criticism on an individual basis to direct student behaviors and outcomes.

Accession Number: _____

Lesson 4B: Grade 1 - Mathematics
(12:30 minutes)

3/4" _____
VHS _____
Yours _____

Questioning Techniques
Plans, Organization and Implementation
Praise and Encouragement/Criticism
Enthusiasm
Variability of Instruction

This instructor reviews past material using questioning techniques and offers praise and encouragement to respondents. Faye varies instruction throughout this math lesson by progressing from questions, to boardwork, to reinforcing games and finally to worksheets. As students complete seatwork, she monitors their understanding of material on an individual basis. The math games played during part of the lesson are an indication of teacher pre-class organization and in-class implementation of plans.

Tape 5: 44:20 minutes

Accession Number: _____

**Lesson 5A: Grade 1 - Mathematics, Language Arts
(27:30 minutes)**

3/4" _____ 000
VHS _____
Yours _____

**Individualization of Instruction
Praise and Encouragement/Criticism
Classroom Management
Concurrent Tasks Management
Teacher's Awareness**

This teacher uses a game to review the numbers from 0 to 100 in her grade one math class. Students are then given time to practice using worksheets while the teacher gives individual assistance as she monitors seatwork. Helen uses riddles to encourage a smooth and quick transition from math to language arts. Low key, non-verbal classroom management strategies occur as Helen uses eye contact, gestures, facial expressions and moves closer to disruptive students in order to return them to on task behavior. Direct discipline is also evident as a classroom management technique. The teacher's awareness of distracting behavior allows her to stop major disruptions before they occur. The fact that Helen monitors student behavior, continues with the lesson, and completes board work shows concurrent tasks management.

Accession Number: _____

**Lesson 5B: Grade 1 - Language Arts
(16:50 minutes)**

3/4" _____
VHS _____
Yours _____

**Classroom Management
Concurrent Tasks Management
Individualization of Instruction
Academic Learning Time
Time-on-Task**

Concurrent tasks management could be the focus of this teacher's performance. Faye seems to be doing five activities at once as some students request assistance about the topic and others require monitoring. Low key classroom management techniques are employed by this teacher to ensure students are on task. Faye offers individual assistance to students as they write their stories about a time when someone said "no" to them.



Planning Services

Alberta

**PLANNING FOR AN EVALUATION
OF TEACHING PERFORMANCE**

VOLUME II

**Teacher Effectiveness: Annotated
Bibliography and References**

**Compiled by
I. Yuzdepski**

**With
L. Elliott**

**Planning Services
Alberta Education
August, 1985**

VOLUME II

**TEACHER EFFECTIVENESS:
ANNOTATED BIBLIOGRAPHY AND REFERENCES**

FOREWORD

Planning for an Evaluation of Teaching Performance comprises four separately bound volumes: A Manual of Guidelines, (Vol. I); Teacher Effectiveness: Annotated Bibliography and References, (Vol. II); Evaluation Procedures: Annotated Bibliography and References, (Vol. III); and Summaries of Instruments for Use in Evaluating Teaching Performance, (Vol. IV).

The content is delimited to gathering and interpreting information about teaching and learning in classroom settings. The main focus is on behaviors of teachers that research has shown to be consistently associated with academic learning by pupils. Some attention is also directed to several classroom behaviors of pupils often found to correlate with effective learning.

The contents of the publication are intended to be used as guidelines. Readers should feel free to reject, adapt or adopt the ideas communicated as local needs dictate. All school jurisdictions have policy and structures in place for evaluating teaching performance. Hence, selections from these volumes might be identified and used in reviewing local policies, guidelines and procedures.

The companion publication, Evaluating and Improving Teaching Performance: An Inservice Kit, by Dr. Laurie Mireau is designed primarily for inservice settings. The Inservice Kit is designed for "hands-on" experience by individuals and by groups at the school and district levels. The Kit illustrates and emphasizes practical considerations and procedures useful in evaluating classroom activities and for integrating these with supervision of instruction.

An integral part of the Kit is a set of 30 videotapes (14 training tapes and 16 demonstration tapes) involving eleven classroom teachers in Edmonton Public Schools. The reader is directed to A Manual of Guidelines, (Vol. I), Appendix 2, for detailed descriptions of the 30 videotapes.

VOLUME II

TEACHER EFFECTIVENESS: ANNOTATED BIBLIOGRAPHY AND REFERENCES

Introduction

This volume includes:

1. A chart listing the 19 criteria to be considered for evaluating teaching performance, and their descriptions. For more information on the criteria, the reader is directed to Vol. 1, Chapter 4.
2. An annotated bibliography organized around the 19 categories. Inservice programs and some observation instruments related to specific criteria are also included.
3. A listing of audio-visual and inservice materials also organized around the 19 criteria.
4. A bibliography to include references not annotated.

Note:

1. The majority of annotations listed are from a) published annotated bibliographies, e.g. Canadian Teachers' Federation, b) the author's annotation, and c) the publisher's annotation.
2. When possible, there has been an attempt to cover elementary, junior high, and senior high grade levels and all subjects areas.
3. Neither the printed nor the audio-visual materials have been evaluated.

Chart A

Criteria Number	Criteria Name	Criteria Description
1.	Plans, Organization, and Implementation	Arrangements and procedures worked out in advance of instruction by the teacher and the extent to which these are appropriate and used.
2.	Academic Learning Time	The time a student is engaged with instructional materials or activities that allow a high level of success for that student.
3.	Teacher's Expectations	The appropriateness of the teacher's predictions of the individual's or group's achievements in a particular content area.
4.	Teacher's Awareness	Alertness to pupil behavior at all times; "withitness," having "eyes in the back of one's head" (Kounin, 1970).
5.	Concurrent Tasks Management	The efficiency and ease with which a teacher handles various classroom activities at the same time.
6.	Pace of Instruction	The rate at which learning experiences are provided for pupils by the teacher.
7.	Classroom Management	The teacher's facility to anticipate, prevent and deal satisfactorily with pupils' interpersonal and academic difficulties. Success in appropriately disciplining pupils.

Criteria Number	Criteria Name	Criteria Description
8.	Feedback to Pupils	Verbal and non-verbal responses to students.
9.	Time on Task	Engaged time; the time a student is attending to instruction in a particular content area.
10.	Enthusiasm	Teacher's display of eagerness and zeal.
11.	Clarity of Instruction	The communication of the teacher is such that the students are totally informed about what they should be doing, where to do it, and for how long, in order to ensure that students do not lose time because they are confused or because they are waiting for decisions to be made.
12.	Task Oriented/ Businesslike Orientation	The degree of academic focus and the teacher's directness in providing academically focussed instruction.
13.	Variability of Instruction	The appropriate use of variety in providing learning experiences for pupils.
14.	Flexibility	The ease with which the teacher adapts and adjusts satisfactorily to varying factors in the classroom setting.
15.	Understanding of Instructional Goals	The pupils' comprehension about what they should be doing, where to do it, and for how long.

Criteria Number	Criteria Name	Criteria Description
16.	Teacher Centred/Direct Instruction	"An instructional strategy where time spent on instruction is sufficient and continuous, content covered is extensive, goals are clear to students, materials are structured and sequential, questions are low level to produce many correct student responses, student progress is monitored, feedback is immediate and correct responses are reinforced. With direct instruction, the teacher sets the goals, plans the activities, chooses the material; questions are convergent, not divergent; interaction is structured, not authoritarian; tasks are cognitive oriented, not humanistic" (Ornstein, 1984: 343).
17.	Praise and Encouragement/Criticism	The appropriate use of positive (e.g., praise and encouragement) and negative (e.g., criticism) reinforcement methods.
18.	Individualization of Instruction	Teaching adapted to the background, ability, and needs of individual learners.
19.	Questioning Techniques	Matching the types of questions asked of the student to the characteristics of the student and to the instructional objectives.

Annotated Bibliography

TEACHER EFFECTIVENESS

1. Plans, Organization and Implementation

Berliner, D. C. *Tempus educare*. In P. L. Peterson and H. J. Walberg (Eds.), Research in teaching: Concepts, findings and implications. Berkeley, CA: McCutchan, 1979.

Berliner discusses a set of variables that research indicates are consistently related to student achievement. Several of these variables -- teacher goal-setting, focus of time spent in the classroom, and coverage of content -- involve teacher planning and organization. A teacher who plans thoroughly will maximize the actual learning time of her/his pupils.

Bernstein, A. Teachers' lesson plans: The myth and the reality, 1981. ERIC. ED 202 813.

The literature shows low correlation between teacher planning procedures and subsequent classroom efficiency. There exist major discrepancies among definitions of how to devise a comprehensive lesson plan, assumptions on the importance of planning, and assumptions on what classroom results a lesson plan should produce. It is suggested that a lesson plan should be viewed as an aid or an option rather than as a necessity that must be strictly adhered to.

Brophy, J. E. Successful teaching strategies for the inner-city child. Phi Delta Kappan, 63(8), April 1982.

In this article, Brophy lists eight teacher characteristics and behaviors that are associated with student learning gains; one of these is classroom management and organization, another is curriculum pacing. Research indicates the importance of planning the curriculum appropriately for the types of students and then implementing these plans adequately so that maximum learning occurs.

Brophy, J. E. Teachers' cognitive activities and overt behaviours. East Lansing: Michigan State Univ. Institute for Research on Teaching, 1980. ERIC. ED 200 561.

Recent research on teacher planning, thinking, and decision making is reviewed. The work on planning reveals that teachers do not use the objectives-based rational models stressed in textbooks, but instead concentrate on the activities included in a curriculum as they seem to relate to the needs and interests of the students. This indicates the need for training teachers to plan more effectively, and suggests the formation of alternate models of the planning process which might be more appropriate than the rational model.

Clark, C. M., and Yinger, B. Research on teacher planning: A progress report. Journal of Curriculum Studies, 11(2): 175-77, Apr-June 1979.

Describes a study of lesson planning based on the thinking processes of elementary teachers. The study focuses on how teachers gather, organize, interpret, and evaluate information to be taught.

Clark, C. M., and Yinger, R. J. The hidden world of teaching: Implications of research on teacher planning. Research Series No. 77. Paper presented at the annual meeting of the American Educational Research Association, Boston, 1980. ERIC. ED 191 844.

Five research studies on teacher planning are reviewed to discover how basic descriptive research can improve the practice. Seven findings are discussed: (1) planning is important to teachers and generally invisible to everyone else; (2) planning differs in practice from traditional prescriptions for planning; (3) planning during the first weeks of school has long range effects; (4) teacher planning transforms curriculum into instruction; (5) routines increase teacher efficiency and flexibility; (6) communicating plans puts thought into action; and (7) teacher reflection aids teacher development.

Mintz, S. L., and Yarger, S. J. Conceptional level and teachers' written plans. Paper presented at the annual meeting of the American Educational Research Association, Boston, 1980. ERIC. ED 189 030.

A study of the lesson planning procedures of 68 elementary school teachers provided categorical data on the tasks typically involved in the planning process. The results indicate that the higher conceptual level (HCL) teachers emphasize diagnosis and student characteristics in their plans, while lower conceptual level (LCL) teachers give special consideration to materials and classroom techniques. The results also indicate that there is no significant difference between HCL and LCL plans, although the differences become more significant when the teachers are further subdivided into age, grade levels taught, and length of time used for planning.

Morine-Dershimer, G. A study of teacher planning. Special Study C. Beginning teacher evaluation study. Technical report series. San Francisco: Far West Lab. for Educational Research and Development, 1976. ERIC. ED 146 160.

Twenty more effective and twenty less effective teachers were studied to determine if they differed in the ways they plan for instruction. Four variables were noted as distinguishing between the planning of the more and less effective teachers. These were: (a) whether the teacher used specific or general information in planning; (b) whether the teacher believed students had the potential to learn the material; (c) whether the teacher considered the cognitive aspects of instruction; and (d) whether the teacher produced much of his or her own instructional materials. When the findings of this study were compared to the findings of a coordinated study of teacher and pupil perceptions of classroom

interaction, two of the variables were found to be important in both teacher planning and classroom interaction. These two were teacher tendency to think in generalistics rather than specifics, and teacher attention to cognitive aspects of lessons.

Ross, R. P. What's happening in elementary school classrooms? A review of selected literature, 1982. ERIC. ED 222 248.

A select portion of the educational management literature is reviewed in three sections. The first section discusses literature concerning the use of time (allocation of school time and engaged time). The second section describes classroom operations to include the format of lessons, characteristics of lesson formats, and the structure of the school day. The final section examines the management of transitions between activities, and the development and implementation of teaching plans.

Smith, H. A. Nonverbal behavior and student achievement in the elementary classroom. Paper presented at the meeting of the Canadian Society for the Study of Education, Saskatoon, 1979. ERIC. ED 181 000.

Use of classroom space, student movement in the classroom, and assorted proxemic and kinesic teacher behaviors are the foci of this study. A bibliography is appended.

Smith, L. R. et. al. Effect of teacher transitions and superfluous content on student achievement and on perception of lesson effectiveness in high school English. Journal of Educational Research, 75(3): 173-77, Jan-Feb. 1982.

This study examined the effect of teacher transitions and lesson content on lesson effectiveness as perceived by high school English students. A lesson was presented involving parallel sentence structure, and students were tested on comprehension of the material. Results indicate that teacher transitions significantly affected achievement but additional content did not.

2. Academic Learning Time

Academic learning time. The best of ERIC on educational management, number 65. Eugene, Oreg.: ERIC Clearinghouse on Educational Management, 1982. ERIC. ED 213 072.

The twelve papers, articles, and reports presented in this annotated bibliography review theories and evidence on the relationship between learning time and academic achievement in elementary and secondary schools. The papers concentrate on three types of learning time: time on task; allocated time; and academic learning time.

Bennett, N. Time to teach: Teaching - learning processes in primary schools. East Lansing: Michigan State Univ. Institute for Research on Teaching, 1981. ERIC. ED 209 242.

A model of the teaching-learning process, which was driven from empirical research on classroom teaching and learning, identifies and describes varied behavioral dimensions of the classroom and how they relate to pupil achievement. The model is based on the assumption that the total amount of engaged time on a particular topic is the most important determinant of achievement and has the components of: (1) quality of schooling; (2) time allocated to curriculum activities; (3) pupil involvement; (4) content comprehension; (5) achievement; and (6) feedback.

Borg, W. R. Teacher coverage of academic content and pupil achievement. Journal of Educational Psychology, 71(5): 635-45, Oct. 1979.

Two studies related content coverage to pupil achievement. With ability and socioeconomic status controlled, a correlation of .40 was obtained between content coverage and achievement. Significant correlations were also obtained between teacher coverage and achievement for two groups of teachers covering two units two months apart.

Cornbleth, C. and Korth, W. Context factors and individual differences in pupil involvement in learning activity. Journal of Educational Research, 73(6): 318-23, July-Aug. 1980.

Three variables: subject area, day of week, and academic activity, were examined to determine whether pupil involvement in academic learning activities is an indicator of pupil learning. Differences were found in each variable, implying more effective use of allocated instructional time will increase academic achievement.

Cotton, K. and Savard, W. G. Time factors in learning. Research on school effectiveness project: Topic summary report. Portland, Oreg.: Northwest Regional Educational Lab., 1981. ERIC. ED 214 706.

Based on the findings of thirty-five valid studies, it was concluded that the greater the amount of engaged time, the higher the levels of student achievement. Of all measures of student learning time (ALT) (a measure based on observable student behavior and is defined as the amount of time a student is engaged in an academic task) constitutes the best predictor of achievement.

Easton, J. Q., et al. Relationship among student time on task, orientation of teachers, and instructional grouping in elementary reading classes. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979. ERIC. ED 169 503.

The objectives of a study of 74 elementary classrooms in Chicago were to determine whether student attention was higher when the teacher directed instruction to a group of students within the room, if there was a difference in student attention when there was one instructional group or more than one in a classroom, and the relationship between student involvement and various school level characteristics, including scores on standardized reading tests and the percent of students from poverty-level families. It was found that the average percent of students not involved in instruction was much greater in classrooms where the teacher was oriented to a group, that involvement was lower in the classrooms when there were two or more groups than when there was only one, that student involvement is significantly related to reading achievement, and that poverty is correlated to the percent of students not involved in instruction.

Fisher, C. W., et al. Teaching behaviors, academic learning time, and student achievement: An overview. Journal of Classroom Interaction, 17(1): 2-15, Winter 1981.

A model is used to show that teaching behaviors which influence student learning have five interrelated functions: diagnosis, prescription, presentation, monitoring and feedback. Fourteen major findings from field research report relationships between academic learning time and student achievement, and a relationship is shown between teaching processes and classroom environment in relation to student learning.

Fisher, C. W., et al. Teaching behaviors, academic learning time, and student achievement: Final Report of Phase III-B, Beginning Teachers Evaluation Study. Technical Report V-1. San Francisco, Calif.: Far West Lab for Educational Research and Development, 1978. ERIC. ED 183 525.

An academic learning time model of classroom instruction is presented. Design, instrumentation, and data collection methods of this research project are outlined. Analysis of the joint relationships among the variables -- teaching processes, academic learning time, and student achievement -- are presented, as well as analyses of student attitudes and retention of achievement.

Fisher, C. W. et al. Teaching and learning in the elementary school: A summary of the Beginning Teacher Evaluation Study, Report VII-1. Beginning Teacher Evaluation Study Technical Report Series. San Francisco: Far West Lab. for Educational Research and Development, 1978. ERIC. ED 165 322.

One outcome of the Beginning Teacher Evaluation Study (BTES) was the concept of Academic Learning Time (ALT), defined as the amount of time a student spends attending to academic tasks while also performing with a high success rate. The more ALT a student accumulates, the more he or she can be assumed to be learning. Five other interrelated components of effective teaching were: diagnosis, prescription, presentation, monitoring, and feedback. Two other variables that are correlated with effective teaching were teacher academic orientation, and teacher orientation toward effect.

Fredrick, W., et al. Procedures and use of time in reading classes in high-gain and low-gain elementary schools in Chicago. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979. ERIC. ED 176 237.

A study of 39 elementary schools in Chicago was conducted to compare two sets of schools, those whose students made above average yearly gains in reading comprehension and those whose students' reading gains were below average. It was found that the proportion of time reading was the teacher's main task, differed significantly and the teachers in the high gain schools were rated by observers to have better organized lessons and to be better managers of time. The classroom observation form used in the study is included.

Hiatt, D. B. and Keesling, J. W. The dependability of classroom observations. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979. ERIC. ED 175 929. Micro-fiche only.

A generalized study of timed observations was conducted in 25 primary grade classes to observe teachers' use of time -- for instruction, evaluation of instruction, and classroom management -- according to the hour and day observed. Teacher behavior in each of the ten categories was observed: (1) clerical; (2) preparation of facilities; (3) preparation of materials; (4) planning for instruction; (5) instruction; (6) evaluating instruction; (7) classroom management; (8) supervision; (9) administration; and (10) not teaching. This study appeared to confirm results reported elsewhere: that a total of between four and six observations of teacher behavior, separated over several days, should provide relatively reliable measures of teacher behavior.

Huitt, W. G., et al. Monitoring and evaluating the critical dimensions of effective classrooms. Philadelphia, PA: Research for Better Schools, Inc., 1982. Paper presented at the annual meeting of the American Educational Research Association, 1982. ERIC. ED 221 597.

Methods and procedures were developed for monitoring and evaluating classrooms on critical dimensions derived from process-product research. These dimensions include student engaged time; content coverage; and success rate. A variables management strategy called the instructional improvement cycle was adopted to assist teachers and administrators in making decisions. The necessity for formal data collection in monitoring critical student behaviors and in meeting requirements of accountability and effective performance is discussed.

Jacobson, K. The relationship of individual student time allocation to reading and mathematics achievement. Report from the Project on Studies of Administration and Organization for Instruction. Madison: Wisconsin Univ. Research and Development Center for Individualized Schooling, 1980. ERIC. ED 196 906.

The major purposes of this study were: (1) to determine whether there were differences in student use of time in elementary schools; (2) to determine whether students who spend more time in reading and mathematics classes exhibit greater gains in reading and mathematics achievement; and (3) to determine whether there are quality measures of time which are related to achievement gains. Data were collected on 200 third grade students in three schools in Wisconsin. Major findings and conclusions include: (1) Students with greater amounts of allocated time exhibited significantly greater achievement gains in mathematics; (2) Time on task rates in reading and mathematics are significantly related to the student's school, teacher, and ability level; and (3) Individual students receive significantly different amounts of teacher time in reading and mathematics.

Levin, T. and Long, R. Effective instruction. Alexandria, Va.: Association for Supervision and Curriculum Development, 1981. ERIC. ED 200 572. Microfiche.

The focus of this book is on three types of variables in classroom learning and instruction: (1) active learning time; (2) feedback and corrective procedures; (3) instructional cues. A section on evaluating instruction examines the roles of classroom observation, rating scales, student questionnaires, content analysis and techniques for self examination. An annotated bibliography of research articles written since 1960 emphasizes the feasibility of implementing the ideas discussed in the book.

Noli, P. A. Principal implements an ALT program. Journal of Classroom Interaction, 17(2), November 1979.

Noli conducted research in two schools of which she was the principal. The focus of this research was academic learning time. The study continued over a two

year period. Academic learning time was operationally defined as "the amount of time students were engaged with materials of intermediate difficulty." Intermediate difficulty was defined as "one step beyond the point of previous mastery." The staff and Noli learned that when schoolwork became easy, this fact was important to the students with regard to evaluation, reinforcement and transference. Standardized test scores were the highest ever achieved by the students.

Placek, J., et al. Academic learning time (ALT-PE) in a traditional elementary physical education setting: A descriptive analysis. Journal of Classroom Interaction, 17(2): 41-47, Summer 1982.

A study analyzed an elementary school physical educator's interactions with students, using the Academic Learning Time-Physical Education instrument. Data were collected to show differences in learning opportunities: (1) for girls and boys; (2) for high, medium, and low ability students; and (3) in different instructional units.

Rosenshine, B. V. Content, time and direct instruction. In P. L. Peterson and H. J. Walberg (Eds.), Research in teaching: Concepts, findings and implications. Berkeley, CA: McCutchan, 1979.

Rosenshine cites several studies that have concentrated on a correlation between "academically engaged minutes" and student learning. In one such study, two teachers were compared who were compatible regarding personal characteristics, but one allowed more opportunity to learn than the other. Teacher A allowed 30 minutes per day of reading, in which students were engaged 80% of the time. Teacher B allotted 60 minutes per day but was more casual and less insistent on high engagement. Her students were reading only 65% of the time. Although teacher B scheduled more time per day for reading than teacher A, real reading time for class B was 39 minutes while real reading time for class A was 24 minutes. When the two classes were tested on basic reading skills, the mean of score of class A was greater than that of class B.

Sanford, J. P., and Evertson, C. M. Time use and activities in junior high classes. Journal of Educational Research, 76(2): 140-47, Jan-Feb. 1983.

The relationship between teachers' use of class time and student achievement, behavior, and attitudes was examined in a study of 102 English and mathematics classes in 11 junior high schools. Time use had a measurable effect on student achievement and attitudes in mathematics classes, but not in English classes.

Saxon, J. Incremental development: A breakthrough in mathematics. Phi Delta Kappan, 63(7): 482-84, March 1982.

A pilot project in 20 Oklahoma public schools during the 1980-81 school year indicated that algebra can be mastered by students of average ability if the

material is presented in increments and sufficient time is allotted for understanding to occur.

Seifert, E. H., and Beck Jr., J. J. Time/Learning relationships in secondary schools: A research report, 1983. ERIC. ED 229 853.

Sixty students in 10 classrooms in 5 high schools were extensively observed over a 10-week period. The study investigated the relationships between student achievement (algebra), and variables of student behavior, instructional strategy, and time on task. Significant positive relationships were found: (1) between achievement gain and the lecture/discussion method, the amount of time students spent on tasks related to the learning objective, and students' total engaged time; and (2) between the lecture/discussion strategy and the amount of time students spent on task. Achievement gains for individual classrooms were significantly related to minutes of time on task per classroom.

Tobin, K. G. and Capie, W. The relationships of selected dimensions of teacher performance with student engagement. Paper presented at the annual meeting of the Mid South Educational Research Association, New Orleans, 1980. ERIC. ED 194 521.

Six variables have a significant effect on student engagement in middle school science activities: (1) teacher wait-time; (2) quality of teacher questioning; (3) cognitive level of teacher behavior; (4) classroom management; (5) student formal reasoning ability; and (6) student locus of control. Data suggest the importance of formal reasoning ability and locus of control as student attributes that affect engagement. Engagement rates appear to be enhanced when teacher questions are relevant, clear, and focussed at a variety of cognitive levels. Higher rates of student engagement are associated with higher measures of classroom management and teaching behaviors that are at a higher cognitive level.

3. Teacher's Expectations

Allington, R. L. Teacher interruption behaviors during primary-grade oral reading. Journal of Educational Psychology, 72(3): 371-77, June 1980.

Teachers' verbal behaviors following oral-reading errors of primary-grade children were contrasted for high and low-ability readers. Teachers were more likely to interrupt poor readers who erred than good readers. The types of interruptions also differed as a function of reading ability level.

Amato, J. A. Social class discrimination in the schooling process: Myth and reality. Urban Review, 12(3): 121-30, Fall 1980.

Examines two factors in social class bias in schooling: (1) the bias of school personnel as reflected in teacher classroom behavior and ability grouping decisions; and (2) the schools' meritocratic ideology.

Bognar, C. J. Dissonant feedback about achievement and teachers' expectations. Alberta Journal of Educational Research, 28(3): 277-87, Sept. 1982.

Investigates impact of achievement test results (N=285) on 13 sixth-grade teachers' expectations using hypotheses from cognitive dissonance theory. Shows teacher expectations changed very little as a result of feedback, and test results for both under- and overestimated students were rejected.

Brookover, W. B. and Lezotte, L. W. Changes in school characteristics coincident with changes in student achievement. Occasional Paper No. 17. East Lansing: Michigan State Univ., Institute for Research on Teaching, 1979. ERIC. ED 181 005.

An in-depth analysis of eight elementary schools, six of which were characterized by improving student achievement and two of which were declining in student achievement. Data were collected through questionnaires and personal interviews. Ten major findings and 10 recommendations for improvement of student achievement are discussed, along with a detailed presentation of relevant data. The most persuasive finding concerned teachers' and principals' attitudes toward student achievement. The staff in the declining schools had low opinions of their students' abilities, while the staff in the improving schools had high opinions of student ability.

Cherry, L. J., and Berman L. S. Teacher-Student interaction and teachers' perceptions of students' communicative competence: A cross-sectional study. Technical Report No. 473. Madison, Wisconsin Univ. Research and Development Center for Individualized Schooling, 1978. ERIC. ED 166 670.

The relationship between teachers' expectations of students' communicative competence in the classroom and certain aspects of teachers' language during

interaction with students was investigated in a study involving 55 nursery school and primary school children and their seven female teachers. The teacher expectation model used in the study proposed that teachers form expectations of students' abilities, that they interact differentially with students depending upon those expectations, and that the expectations are directly related to students' achievement. Results of a sociolinguistic analysis of samples of teacher/student interaction during classroom lessons suggested that the original version of the teacher expectation model was neither powerful nor consistent in its predictions.

Clifton, R. A. The effects of students' ethnicity and sex on the expectations of teachers. Interchange on Educational Policy, 12(1): 31-38, 1981.

A study examining the relationships among students' ethnicity, sex, teacher expectations, and academic achievement indicates that teacher expectations, which are sometimes based on sex and/or ethnic stereotypes, affect student academic achievement.

Clifton, R. A. Ethnicity, teachers' expectations and the academic achievement process in Canada. Sociology of Education, 54(4): 291-301, Oct. 1981.

Examines the effect of teacher expectations on differences in achievement between German-speaking and French-speaking ninth graders in English-speaking classrooms. Results suggest that teachers base their expectations on student intellectual abilities and previous performance rather than upon ethnicity or other characteristics.

Cooper, H., et al. Relations between student achievement and various indexes of teacher expectations. Journal of Educational Psychology, 74(4): 577-79, Aug. 1982.

The relative effectiveness of three measures of teacher expectations of predicting students' achievement was studied. Teachers' perceptions of student ability and the discrepancy between teacher-perceived ability and student-tested ability were related to achievement change. The amount of improvement the teacher expected was unrelated to the other measures.

Cooper, H. M., et al. Teachers' beliefs about interaction control and their observed behavioral correlates. Journal of Educational Psychology, 72(3): 345-54, June 1980.

Teachers viewed interactions with low-expectation students as less controllable than those with high-expectation students and teacher initiations were perceived as more controllable than child initiatives. In addition, less perceived control over a student was associated with less feedback from the teacher.

Crano, W. D., and Mellon, P. M. Causal influence of teachers' expectations on children's academic performance: A cross-lagged panel analysis. Journal of Educational Psychology, 70(1): 39-49, Feb. 1978.

In a 4-year longitudinal study of 4,300 British elementary school children, teachers' expectations influenced children's achievement to an extent appreciably exceeding that to which children's performance impinged on teachers' attitudes. Teachers' evaluations of children's social performance affected later achievement to an extent exceeding that attributable to academic expectations.

Elijah, D. Teacher expectations: Determinants of pupils' reading achievement. Reading Improvement, 17(2): 117-21, Summer 1980.

Results of a study of teacher rankings of reading readiness suggested that teacher rankings are as reliable as rankings using the Metropolitan Readiness Tests; the results did not indicate that teacher expectations of student achievement can be altered.

Entwisle, D. R., and Hayduk, L. A. Academic expectations and the school attainment of young children. Report No. 269. Baltimore, Md.: Johns Hopkins Univ. Center for Social Organization of Schools, 1978. ERIC. ED 174 359.

This report investigated how expectations of significant others and feedback provided to children may affect children's achievement and academic self image in the first grade. Multiwave data on several hundred children were gathered. It was found that parents' expectations for their children's performance responded to the IQ of the child, to the child's sex, and to the kindergarten teacher's forecast. Children's performance levels from the first report card to the end of the first grade were highly continuous. This suggests that even the earliest marks children receive are major determinants of future evaluations and that teachers' earliest formal evaluations may play a leading role in determining achievement levels in young children.

Fry, P. S. Process measures of problem and non-problem children's classroom behavior: The influence of teacher behavior variables. British Journal of Educational Psychology, 53(1): 75-88, Feb. 1983.

Results of analyses of 15 teachers and pupil process measure variables suggest that deterioration is noticeable in teachers' interactions, with problem children receiving more negative affect and less sustaining feedback from their teachers over a four month observation period.

Grapko, M. F. The relation of teacher expectancy and pupil self-assessment to pupil performance. Ontario Ministry of Education, 1980.

Data were collected in 1974 to 1975 on the rating scores of 792 pupils. These pupils were then divided into the following five categories: (1) two concordant categories of those whose ratings and scores on the security test were either

high or low, (2) two discordant categories in which the ratings and scores differed markedly, and (3) a control group whose ratings and scores fell within the half standard deviation of the mean. Results showed that students in the discordant categories exhibited less steady growth in academic achievement than those in the concordant categories.

Gurin, P. and Morrison, B. M. Two-way socialization processes in the classroom. Final Report. Ann Arbor: Michigan Univ. Institute for Social Research, 1980. ERIC. ED 198 194.

The major objectives of this study were to examine: the effect of teacher behavior on pupil achievement and feelings on control; how pupil characteristics affect teachers' differential behavior toward different pupils; how the effect of teachers' behavior on pupil varies according to the characteristics of the pupils; how changes in pupils' attitudes and expectancies mediate their changes in academic performance. The sample consisted of 24 teachers and 855 pupils in sixth grade classes in a large metropolitan area. Recognizing weaknesses in the design and analyses the report appears to suggest that teachers and prospective teachers may be discriminating between pupils on the basis of their sex and race as a function of the teachers' own personal beliefs. The authors suggest that the report be used to sensitize school systems and schools of education to make teachers aware of their judgements and behaviors and of the effects on students.

Guskey, T. R. The effects of change in instructional effectiveness on the relationship of teacher expectations and student achievement. Journal of Educational Research, 75(6): 345-49, Jul-Aug. 1982.

To determine whether increasing teachers' effectiveness influences the relationship between teachers' initial expectations for a student and the student's actual performance, data were gathered on intermediate and secondary school teachers who participated in a mastery learning workshop. Correlations between teacher expectations and student performance were lower than those of a control group.

Hughes, J. R. How do you behave? Your non-verbal actions are critical to student motivation. Music Educators Journal, 67(5): 52-53, Jan. 1981.

Explains types of non-verbal cues which teachers can use to express high expectations to their students. Briefly considers the ethics of the intentional use of non-verbal motivation.

Hutslar, S. The expectancy phenomenon. Journal of Physical Education and Recreation, 52(7): 88-89, Sept. 1981.

Teacher expectations of student success or failure greatly affect student performance levels. Four distinct areas of teacher/student interaction are: climate (emotional tone of the interaction); input (new material presented to the student); feedback (the teacher's use of praise and criticism); and output (length of time a teacher spends with a student).

Jeter, T., and Davis, Jr. O. L. Differential classroom interaction in social studies as a function of differential expectations of pupil achievements. Journal of Social Studies Research, 6(1): 1-7, Winter 1982.

Describes a study which investigated whether differences in teacher verbal interactions with students are a function of achievement expectations or sex differences. Ten fourth grade social studies teachers and 120 students were observed using the Brophy - Good dyadic observation system. Results indicated that achievement expectations not sex, influenced teacher interactions.

Jeter, J. Teacher expectancies and teacher classroom behavior. Educational Leadership, April 1973.

Jeter reviews studies completed to date regarding teacher expectations and student achievement. Many of these studies discovered a difference between the treatment of girls and boys by teachers (Davis, Slobodun, 1967; Sikes, 1971; Lippitt, Gold, 1959). The experimental method introduced by Rosenthal and Jacobson (1968) in which teachers' expectations were manipulated have been completed by Berg, 1970 and Fleming and Anttonen, 1971. Two results of these studies are: teacher expectations may affect student achievement, and teacher expectancy affects teacher behavior and pupil behavior.

Low, L., and Wolfle, L. M. Effects of a first grade teacher on students' achievement in four subsequent years. Elementary School Journal, 83(5): 528-36, May 1983.

Students of a first-grade teacher designated as "effective" on the basis of pupils' short-term gains in achievement did not perform as well as students of other teachers in subsequent elementary grades.

Martinek, T. J. Pygmalion in the gym: A model for the communication of teacher expectations in physical education. Research Quarterly, 52(1): 58-67, March 1981.

Research has shown that teacher expectations not only determine certain types of student performance but also serve to sustain low and high levels of performance. A model shows how teacher expectations are formed, how they are communicated, and how they sustain levels of student performance in physical education.

Minner, S. Expectations of vocational teachers for handicapped students. Exceptional Children, 48(5): 451-53, Feb. 1982.

The study examined three components of the initial expectations of 66 secondary vocational teachers toward mainstreamed educable mentally retarded and learning disabled children. Among findings was that the presence of the labels lowered the initial and behavioral expectations of teachers in the sample.

Munroe, M. J. Effective teacher behaviors as an avenue to enhance the self-esteem of teachers. Paper presented at an Inservice held at Cholla High School, Tucson, 1982. ERIC 228 162.

A discussion of how teachers perceive students and interact with them points out that one characteristic of an effective teacher is a high level of interactive skills. Selected teacher behaviors which enhance the quality of teacher-student contacts are discussed. These include: (1) modeling desirable behavior; (2) critical skills of constructive questioning; (3) creative listening; (4) effective use of time; (5) clarity of teacher presentation; and (6) immediate feedback and encouragement. Consistency in these behaviors, regardless of the ability levels of the students, is identified as a hallmark of effective teaching.

Pandya, H. S. Teacher expectancy related to student performance in vocational education. University Park, Pa.: Pennsylvania State Univ. Department of Agricultural Education, 1978. ERIC. ED 160 890. Microfiche only.

A study was designed (1) to discover the effect of teacher expectation on student performance in the cognitive and psychomotor skills, and (2) to analyze students' attitudes toward teachers because of teacher expectations. Two different instructional units were taught in two comprehensive high schools. Each class was divided into three treatment groups, of which one was the control group. After one month of instruction, students were tested in each subject unit. The findings revealed that the teacher's expectations did change the students' attitudes toward the teacher and subject; however, written comments by the teacher on students' assignments had no significant effect on the level of student achievement.

Parsons, J. E., et al. The effects of teachers' expectancies and attributions on students' expectancies for success in mathematics. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979. ERIC. ED 180 787.

Investigates the effects of teachers' expectancies and patterns of feedback to students on students' expectancies for success in mathematics. Six predictions involving various levels of expectancy, feedback, and sex were made. Initial statistical analysis supported the proposed relation between teachers' expectancies and student expectancies, but many of the predictions were not supported. Only student sex and teachers' expectancies were found to be significant predictor variables by a stepwise regression. Additional statistical procedures were then carried out; among the findings it was indicated that "bright" females were treated differently in each of the two classroom types.

Proctor, C. P. Teacher expectations: A model for school improvement. The Elementary School Journal, 84(4), March 1984.

Proctor presents a model for improving school effectiveness developed by the Connecticut Department of Education. One of the focal points of the success of this model is its recognition of the positive effects of teacher academic

expectations on students. A review of the literature regarding teacher expectations and student achievement precedes the discussion of the model.

Reavis, C. A., and Shine, S. C. A study of the effects of prefatory remarks on teacher evaluation, 1977. ERIC. ED 175 811.

A test was made to determine the impact of positive or negative expectations on individuals conducting formal observation of teachers in the classroom for the purpose of evaluation. Two groups of graduate students who were receiving training in classroom observation viewed a video tape of a teacher instructing her class. Group one was given the impression that she had been a fine education student in college; group two was told casually that she had not been outstanding in college. A review of the evaluation ratings by the two groups revealed that their responses to the teacher's classroom behavior were colored by the prefatory remarks they had heard, and that they were inclined to judge her with some positive or negative bias.

Richey, L. S., et al. Teachers' attitudes and expectations for siblings of learning disabled children. Minneapolis: Minnesota Univ. Institute for Research on Learning Disabilities, 1980. ERIC. ED 203 613.

Based on their classroom experiences with learning disabled (LD) non-handicapped students during the school year, 16 third grade teachers were asked to complete rating scales predicting performance of siblings of these students who might be assigned to them in the future. The data suggest that previous experiences with LD children bias teachers' expectations for the younger siblings of these children.

Rosenthal R. The pygmalion effect lives. Psychology Today, Sept. 1973.

In 1968, Rosenthal theorized that students live up, or down, to their teacher's expectation of them. Many educators criticized his results extensively. This article outlines some research studies that have been completed since then in which the pygmalion effect is further substantiated.

St. George, A. Teacher expectations and perceptions of Polynesian and Pakeha pupils and the relationship to classroom behavior and school achievement. British Journal of Educational Psychology, 53(1): 48-52, Feb. 1983.

A study of 90 nine year olds in five ethnically mixed New Zealand classrooms indicated that teachers perceived Polynesian pupils less favorably than White students on dimensions reflecting parent/home factors and academic work skills. Observations of teacher pupil interaction, however, showed no ethnic differences.

Stern, P. R., and Shavelson, R. J. The relationship between teachers' grouping decisions and instructional behaviors: An ethnographic study of reading instruction. Paper presented at the annual meeting of the American Educational Research Association, Los Angeles, 1981. ERIC. ED 201 971.

An ethnographic study of small group reading instruction was conducted to learn how teachers' judgements of students' abilities influenced the way they grouped students for reading instruction and the effects of these grouping practices on teachers' planning and instructional behaviors. Two teachers and 20 students were observed over the course of a six-month period in a team taught fifth/sixth grade classroom at a university affiliated elementary school. The results indicated that teachers group students on the basis of their reading ability. Once grouped, the group and not the individual child became the unit for many teaching decisions. Teachers' plans for the low-ability group differed considerably from their plans for the high-ability group. Procedures, decoding and basic comprehension skills, and highly structured assignments were prescribed for the low-ability group, while flexibility in procedures and assignments and an emphasis on sophisticated comprehension skills were stressed for the high-ability group.

Swann, W. B., Jr., and Snyder, M. On translating beliefs into action: Theories of ability and their application in an instructional setting. Journal of Personality and Social Psychology, 38(6): 879-88, June 1980.

Instructors were taught that pupil ability was either extrinsic or intrinsic, and were led to believe one pupil possessed high ability and one low ability. Instructors adopted teaching strategies based on the theory of ability they had been taught. Pupils behaved in ways which confirmed teacher expectations.

Weinstein, R. S. and Middlestadt, S. E. Learning about the achievement hierarchy of the classroom: Through children's eyes. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, April 8-12, 1979. ERIC. ED 170 071.

To investigate how students perceive and interpret teacher behavior toward high and low achievers in elementary classrooms, two measures were constructed: a semistructured interview schedule, and a 60-item teacher treatment inventory which allowed students to rate teacher treatment. Preliminary findings suggest that students do perceive differential treatment by the teacher of ~~male~~ high and low achievers. Additionally, it appears that students read into teacher behavior much beyond what the researchers commonly think they are measuring. It was noted that by not waiting for an answer to a question or by collecting incomplete assignments from students, teachers can limit the opportunities for a student to perform and learn.

4. Teacher's Awareness

Dykman, B. and Reis, H. T. Personally correlates of classroom seating position. Journal of Educational Psychology, 71(3): 346-54, June 1979.

Personality, personal space, and attitudinal measures were administered to high school students. Comparisons of extreme sections of the classroom revealed a significant polarization of student traits on three categories of variables dominated by self-concept and class participation. Differential participation and physical isolation were closely related to self-concept.

Good, T. L. and Brophy, J. E. Looking in Classrooms (3rd Ed.). New York: Harper & Row, 1984.

"Classroom Complexity and Teacher Awareness" is the title of the second chapter in this edition. A section of this chapter presents information about why teachers are not aware of classroom activities as much as they could be. One reason, claim the authors, is that no formal useful system exists to make teachers more aware of their own classroom behavior and the results of that behavior.

Kounin, J. S. Observing and delineating techniques of managing behavior in classrooms. Journal of Research and Development in Education, 4(1), Fall 1970.

Kounin defines "teacher awareness" as "withitness": the ability of the teacher to know what is happening in her/his classroom at all times and to communicate that knowledge to her/his students. This classroom management technique is extremely beneficial, claims Kounin, in that it prevents many inappropriate student behaviors before they begin.

5. Concurrent Tasks Management

Denham, C. H. and Michael, J. J. Teacher sense of efficacy: A definition of the construct and a model for further research. ERQ, 6(1), Spring 1981.

This paper presents a review of the literature on teacher sense of efficacy and other constructs that may offer indirect insight into the phenomenon of teacher confidence and its relationship to student outcomes. A link exists between the ability of the teacher to manage many classroom situations successfully and her/his feelings of efficacy.

Eder, D. The impact of management and turn-allocation activities on student performance. Discourse Processes, 5(2): 147-59. Apr.-June, 1982.

This paper examines the effect of management and turn-allocation activities on students' reading performance. Thirty-two videotaped reading group lessons in a first grade classroom were coded and analyzed using a sociolinguistic approach. The results indicate that the teacher was often oriented toward other members while eliciting information during students' reading turns and that, consequently other members frequently provided the correct word. Furthermore, the teacher's orientation away from the reader appeared to be primarily due to performing management, turn-allocation, and academic activities simultaneously. While opportunities for and incidences of reading turn disruption were found at all group levels, they were twice as frequent in lower ability groups as in higher ability groups.

Good, T. L. & Brophy, J. E. Looking at classrooms (3rd Ed.). New York: Harper & Row, 1984.

Chapter two of this publication is concerned with the complexity of classroom situations and the necessity of the teacher to manage many tasks at the same time. Teachers must not only handle a number of classroom activities, but must also interpret student behaviors continually.

Ornstein, A. C. Do teachers make a difference? Childhood Education, May/June 1983.

Ornstein's review attempts to answer the title question by referring to various studies which have shown that teachers do make a difference: specifically, teacher behaviors make a difference. The author refers to Kounin's term of "overlapping" which means "sustaining an activity while doing something else at the same time." This teacher behavior is a classroom management skill and may lead, in part, to an effective learning situation.

6. Pace of Instruction

Noonan, R. and Wold, H. A comparison of six models of school learning. Evaluation in Education, 7, 1983.

Presents six models of student learning from various researchers including Carroll, Cooley and Lohnes. Bloom's normative model leads to the attainment of mastery learning. Teachers can influence the students' rates of learning through the instructional process presented in this article.

Piechowski, M. M. and Colangelo, N. Developmental potential of the gifted. Gifted Child Quarterly, 28(2), Spring 1984.

This article on the gifted child suggests that it is necessary to pace instruction appropriately for any special needs student. Piechowski and Colangelo imply that teachers must realize the importance of organizing and pacing their mode of instruction to accommodate the learning levels of all their students.

Slavin, R. E. and Karweit, N. L. Cognitive and affective outcomes of an intensive student team learning experience. Journal of Experimental Education, 50(1), Fall 1981.

Three methods of pacing instruction are presented. These methods involve student teams of fourth and fifth-grade students. Results indicated that student team learning has positive influences on students regarding friendships, self-esteem, language progress and reading achievement.

7. Classroom Management

Bechtol, W. and Anderson, D. Preventative discipline: A review of the literature. Small School Forum, (2), Winter, 1981.

Presents a literature review citing studies completed by Kounin, Evertson and Anderson and others. These studies suggest that the key to classroom problem management is preventative discipline strategies. The authors offer six strategies a teacher may employ to accomplish problem management.

Borg, W. R. and Ascione, F. R. Classroom management in elementary mainstreaming classrooms. Journal of Educational Psychology, 74(1): 85-95, Feb. 1982.

A total of 39 elementary school teachers in mainstream classrooms were randomly assigned to two groups. Experimental teachers were trained in the Utah State University Classroom Management Program whereas the control teachers were trained in a similar program of the same duration that covered different teaching skills. The student sample consisted of 322 students selected from participating classrooms and included subsamples of handicapped and minority students. Analysis of covariance of 16 teacher behaviors found that experimental teachers were superior to control teachers in nine behaviors. Experimental students obtained significantly more favourable posttreatment means than control students on-task, mildly deviant, and seriously deviant behavior. Most comparisons between handicapped and racial subgroups were not significant.

CEDR. Centre on Evaluation, Development, and Research. Effective classroom management. (Hot Topics Series). Bloomington, in: CEDR, Phi Delta Kappa, 1982-83.

Contains research articles as well as articles that provide practical information for teachers who wish to evaluate and improve their management skills.

Curwin, R. L. and Mendler, A. N. High standards for effective discipline. Educational Leadership, 41(8), May 1984.

Clearly defined expectation and limits are congruent with an effective classroom management system. Curwin and Mendler suggest the use of a "social contract" as one method of maintaining classroom control. This contract includes such items as non-negotiable teacher/school rules, negotiable rules, consequences if rules are broken, as well as student-developed rules. Students benefit from such a system because it allows them the opportunity to take responsibility upon themselves.

Emmer, T. et al. The first weeks of class . . . And the rest of the year. Research and Development Report No. 6005. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979. ERIC. ED 175 861.

Classroom observation of 28 third-grade teachers illustrated the management and planning strategies that differentiate effective teachers from less effective teachers. Effective managers communicated a workable system of rules and procedures, monitored students carefully, and were consistent in treating inappropriate behavior. Less effective managers did not establish their credibility at the outset of the academic year and were unpredictable in both their feedback and discipline techniques. Discipline and organizational procedures were delineated during the first weeks of the school year by the more effective teachers.

Evertson, C. M. Differences in instructional activities in high and low achieving junior high classes. Research and Development Report No. 6106. Austin: Texas Univ. Research and Development Center for Teacher Education, 1980. ERIC ED 195 546.

This paper focuses on the strategies and behaviors in classrooms of teachers who are teaching similar subject matter content to classes of differing ability levels. Higher ability classes had teachers who: (1) described and presented objectives and materials more clearly; (2) provided content and reasonable work standards related to student interests and needs; (3) were consistent in dealing with student behavior; (4) were receptive to student input; (5) nurtured affective skills; and (6) maintained a task-oriented focus. A comparison of the two low achieving classes suggests that there are optimal ways of providing instruction to increase productive learning time.

Galluzzo, G. R. Changing teacher performance with protocols. Paper presented at the annual meeting of the American Educational Research Association, New York, 1982. ERIC. ED 215 973.

This study examined whether selected protocol materials in classroom management, used in inservice courses, would bring about long-term significant changes in teachers' classroom performance. Fifteen teachers participated in the study by taking an inservice course on classroom management and discipline. The first module consisted of group alerting behaviors and the second module demonstrated teacher behaviors that encourage "withitness". The subjects also practised identifying the specific behaviors on transcripts of actual classroom interaction and participated in discussions. Teachers were observed in their classrooms immediately following completion of the modules, and two observations were made three and six weeks later. Findings indicated that, while the teachers used newly learned behaviors immediately following the training sessions, long-term changes in behavior were difficult to determine.

Goldstein, J. M. and Weber, W. Teacher managerial behaviors and student on-task behavior. Paper presented at the annual meeting of the Southwest Educational Research Association, Houston, 1979. ERIC. ED 178 484.

The hypothesis that teacher managerial behavior may have a greater effect than teacher instructional behavior on ultimate student achievement is supported through the explication of seven major approaches to class management. Forms of teacher managerial behavior examined are: (1) authoritarian; (2) behavior modification; (3) common sense; (4) group process; (5) instructional; (6) permissive; and (7) socio-emotional climate. The relationship between these seven clusters of teacher behaviors and student on-task behaviors are extended to infer causality between the teacher behaviors and the student's academic achievement levels.

Good, T. L., et al. Teaching mathematics in high and low SES classrooms: An empirical comparison. Journal of Teacher Education, 29(5): 85-90, Sept.-Oct. 1978.

Low income classrooms demand that teachers supervise and monitor students' seatwork actively and control private interactions with students. Praise and a relaxed climate are more important in low than in high income settings.

Harvey, K. D. Classroom management: An annotated bibliography. 1980. ERIC. ED 198 075.

This annotated bibliography cites reference materials that will assist the classroom teacher in conceptualizing a comprehensive approach to classroom management.

Lockavitch, Jr. J. F. Seating arrangement and classroom behavior: A simple but sometimes overlooked method for classroom control, 1979. ERIC. ED 179 014.

This paper discusses the importance of environmental factors -- namely, classroom seating -- to classroom management. A specific incident is discussed, whereby disruptive behavior developed in students because of the spatial separation of their desks from the teacher's desk. Solutions to the seating problem are offered in the text and in figures drawn for use by the reader. The paper concludes that effective use of the environment can greatly assist teachers in keeping their classes under control.

National School Boards Association. Student discipline: Practical approaches, 1979. ERIC. ED 177 691 Microfiche.

This report covers trends in discipline policies and policy-making and alternative and innovative school programs designed to diminish behavioral problems in the classroom. The appendix offers sample discipline policies from three different school districts.

Project T.E.A.C.H: Teacher effectiveness and classroom handling. Performance Learning Systems, 446 Old Hook Road, Suites 25-26, Emerson. New Jersey. 07630. 1974 (A training course under the auspices of the Alberta Teachers' Association).

Project T.E.A.C.H. is a course on classroom management techniques offered through the ATA. This course was introduced in Alberta by Performance Learning Systems, a New Jersey based educational organization. The course involves three major areas of classroom management technique development: a) concentration on learning the students' agenda, b) concentration on overcoming resistance, and c) concentration on problem solving with decision-making control.

Rounds, T. S., et al. An analysis of teachers' rule systems at a successful school verification inquiry, Volume IV. Ecological perspectives for successful schooling practice. San Francisco: Far West Lab. for Educational Research and Development, 1981. ERIC. ED 230 498.

Rule systems established in successful elementary school classrooms are analyzed. In chapter 2, the sample, methodology, and data analysis procedures used in the rules analysis are described. Also discussed are data collection procedures, including narrative descriptions and classroom observations. Data analysis methodology, including identification of rules in each classroom, classification of rules, and consonance of rules across classrooms, is detailed. Two appendices present instructions to teachers coding classroom rules and charts of teachers rules.

Strother, D. B. Practical applications of research. Phi Delta Kappan, 66(10), June 1985.

Reviews a number of research studies (Kounin, 1970; Emmer, et al, 1980; Clark and Yinger, 1980) and concludes that these researchers have identified ways of creating positive, effectively managed classroom environments that facilitate learning. Because no single approach to planning is sufficient, the researchers recommend that teachers adopt a comprehensive, data-based, selective approach to classroom management.

Tobin, K. G. and Copie, W. Student engagement in middle school science classrooms. Paper presented at the annual meeting of the Southeastern Association for the Education of Teachers of Science, Orlando, FL, 1980. ERIC. ED 194 522.

Thirteen junior high school science classes were observed to determine how variation in classroom management techniques related to variation in pupil engagement rates, and how rates and types of teaching behaviors related to rates and types of pupil engagement. The relationship between teacher behaviors of attending, recalling, collecting, comprehending, quantifying, planning, and generalizing and pupils' responsive engagement rates was documented. Higher pupil engagement rates were observed in classrooms where appropriate classroom behavior was maintained; the teacher reinforced and encouraged the

efforts of learners to maintain involvement; and where teaching methods were appropriate for lesson objectives, pupils cognitive ability, and the classroom environment.

Virtuli, S. and Phelps, C. Classroom transitions. Childhood Education, 57(2): 94-96, Nov-Dec. 1980.

Recognizing that inadequate transitions cause classroom disruption, the authors offer several approaches to achieving smooth transitions from activity to activity for preschool children.

Weber, W. A. et al. A mini-instructional system for increasing teacher classroom management competence. Paper presented at the annual meeting of the Association of Teacher Educators, Orlando, 1979. ERIC. ED 170 273.

The findings from two studies (Pre-Post and Matched Pairs) suggest that the mini-instructional system that was designed to provide teachers with training in the analytic-pluralistic approach to classroom management did have a very positive impact on those teachers who received this training. Specifically, findings suggest that the training is effective in fostering those teacher attitudes and teacher managerial behaviors thought to be related to desirable student outcomes.

Worsham, M. E., and Evertson, C. M. Systems of student accountability for written work in junior high school English classes. R & D Report No. 6105. Austin: Texas Univ. Research and Development Center for Teacher Education, 1980. ERIC. ED 196 008.

A study was conducted to determine the relationship between effective classroom management and the manner in which teachers assign and hold students responsible for written work in junior high schools. Seven more effective and seven less effective teachers were studied. The findings reveal that the more effective managers (1) were more clear and specific with format requirements for written work, (2) had more consistent and efficient procedures for communicating assignments, (3) had more systematic procedures for regularly supervising and encouraging students as they worked, (4) stressed careful and consistent checking and turning in of classroom and homework assignments, and (5) were more consistent in the use and manner of feedback to students about assignments. The results suggest a definite positive relationship between comprehensive accountability systems for written work and effective classroom management. (Summaries of two teacher accountability systems are appended).

8. Feedback to Pupils

Anderson, L. M., Evertson, C. M. and Emmer, E. T. Dimensions in classroom management derived from recent literature. Journal of Curriculum Studies, 12(4), 1980.

This article presents results from a study of classroom management conducted employing third grade teachers in low socio-economic schools. The authors suggest that there is a correlation between good classroom managers and the amount of student engaged time. One behavior that was demonstrated continuously by effective classroom teachers was that of providing systematic feedback to students about their progress. This reminded the students of their accountability and acted as a reminder to teachers as well.

Bardwell, R. Feedback: How does it function? Journal of Experimental Education, 50(1): 4-9, Fall 1981.

A study of feedback delay, expectation, and development was conducted in grades four, six, and eight, to assess whether feedback on a school related learning task serves an informational or reinforcing function. Results indicate that feedback serves an informational function and delayed feedback facilitates retention, contrary to reinforcement theory rules.

Beatty, M. J. and Behnke, R. R. Teacher credibility as a function of verbal content and paralinguistic cues. Communication Quarterly, 28(1): 55-59, Winter 1980.

Points out that teachers frequently emit nonverbal messages that contradict their verbal messages. Isolates vocal cues (special characteristics of the communicator's voice) as the nonverbal behavior for study. Examines the interaction of vocal cues and verbal messages with respect to impact on teacher credibility.

Bloom, R. B. and Bourdon, L. Types and frequencies of teachers' written instructional feedback. Journal of Educational Research, 74(1): 13-15, Sept-Oct. 1980.

Because many teachers demonstrate limited use of knowledge of feedback strategies positively associated with student achievement, providers of preservice and inservice teacher education should review feedback research and instruct teachers on its effective use.

Brophy, J. E. Advances in teacher research. The Journal of Classroom Interaction, Winter 1979.

Brophy's literature review presents many studies that have attempted to define effective teaching. The elements of direct instruction form a cluster of behaviors and one of the behaviors is feedback to pupils. Rosenshine (1978),

Medley (1977) and Borich (1977) outline the importance of corrective and individualized feedback on a continual basis.

Brophy, J. E. and Good, T. L. Teacher behavior and student achievement. In M. Wittrock (Ed.), Handbook of research on teaching (3rd Ed.). New York: Macmillan 1985.

Chapter eleven of this book presents studies and conclusions comparing teacher behavior and student achievement. In particular, one such study conducted by Good and Grouws (1977) showed that in higher achieving classes the teacher gave feedback to students regarding academic progress, behavior and statement clarifications on a continual basis.

Clifford, M. M. The effects of quantitative feedback on children's expectations of success. British Journal of Educational Psychology, 48: 220-6, June 1978.

A pair of studies with first, third, and fifth graders supports the prediction that concrete, quantitative feedback, as opposed to qualitative comments, increases the validity of children's expectations of their level of performance.

Edwards, C. H. and Surma, M. The relationship between type of teacher reinforcement and student inquiry behavior in science. Journal of Research in Science Teaching, 17(4): 337-41, July 1980.

Determines the effect on inquiry of different contingencies of reinforcement. Classes of biology students were exposed to one of four treatments: verbal reinforcement and mimicry; using student ideas as reinforcers; using special privileges as reinforcers; and no reinforcement. Results include verifications that verbal reinforcement and mimicry reduce inquiry.

Hannafin, M. J. The effects of systematized feedback on learning in natural classroom settings. Educational Research Quarterly, 7(3): 22-29, Fall 1982.

The effect of systematized feedback on mathematics performance in natural classroom settings was examined. Three sixth grade classes served as subjects during the 12-week study. A 25-item computation post test was administered. Results confirm the effectiveness and practicality of comprehensive feedback programs in natural classroom settings.

Hodges, D. L. How to improve your students' learning through practice exercises and feedback, 1980. ERIC. ED 220 150.

Research indicates that students' learning performance can be improved through techniques of "action-feedback-correction." The benefits of this technique include individualized instruction at low cost, a clear communication of learning objectives, improved student learning, and better monitoring of student progress.

Hoffman, J. V. Feedback to oral reading miscues. Parts I & II. Final Report, 1981. ERIC. ED 227 455.

The first two parts of a three-part final report examined the nature, characteristics, and effects of verbal feedback to student reading miscues. The major portion of Section II contains comprehensive summaries of three major and several follow-up studies.

Hoffman, J. V. Feedback to oral reading miscues. Part III. Final Report, 1982. ERIC. ED 227 456.

This volume contains articles and unpublished manuscripts that have been written as part of this project. The topics include: (1) teacher verbal feedback during reading instruction; (2) teacher verbal feedback to the reading miscues of high and low achieving students; (3) characterizing teacher feedback to student miscues during oral reading instruction; (4) training for feedback to an oral reading analysis system; (5) inservice and preservice teacher feedback to student miscues; and (6) the effects of differentiated patterns of verbal feedback to miscues on word identification strategies and success.

Oien, F. M. Teacher directed behavior toward individual students, 1979. ERIC. ED 175 826.

A study of five teachers and 316 junior high school physical education students revealed an unequal distribution of positive reinforcement teacher behavior among individual students. Male students were found to receive a significantly larger amount of encouraging teacher attention than did female students in 18 out of the 21 classes sampled. Teacher behavior patterns may reflect the teacher's situational reaction to class chemistry. Effective individualized inservice programs to aid in overcoming personal bias detrimental to the classroom situation are needed.

Smith B. D. Responding effectively to incorrect answers. Social Studies, 72(2): 56-60, Mar-Apr. 1981.

Suggests that teachers should view corrective feedback as a constructive reaction to students who answer questions incorrectly and presents examples of how corrective feedback techniques can be used in social studies classes. Stresses that, in order to benefit from corrective feedback, students must focus their attention on the cognitive information presented.

9. Time on Task

Anania, J. The influence of instructional conditions on student learning and achievement. Evaluation in Education, 7, 1983.

This research study includes literature review on instructional conditions that affect student achievement. One of these conditions is quality learning time: student actual time-on-task. Studies completed by Bennett report that active participation of students in the same classroom ranged from 20% to 100%. High achieving students, observed Good and Beckerman, averaged 76% time-on-task whereas low-achieving students averaged 64% active learning time.

Anderson, L. W. Learning time and educational effectiveness. Reston, Va.: National Association of Secondary School Principals, 1980. ERIC. ED 210 780. Microfiche only.

The author cites evidence that time-on-task is related to student achievement and describes two instructional approaches that have been associated with high levels of time-on-task. The first of these is mastery learning, which includes nine key elements, and the second, direct instruction has ten key elements. Central to both is the need for clearly defined goals, communication of expectations to students, and careful monitoring of student progress.

Archambault, Jr. F. X., et al. The classroom activities log: A personalized record of a child's school day as recorded by his/her teacher. Paper presented at the annual meeting of the National Council on Measurement in Education, San Francisco, 1979. ERIC. ED 178 609.

The development and validation of an instrument designed to measure the quantity of types of instruction delivered to individual students is described. The Classroom Activities Log (CAL) is a teacher-complete record of students' instructional experiences. Some of the features of CAL are: (1) student focus; (2) limited number of variables; (3) minimal teacher training and costs; (4) availability of data on individual students' daily activities; and (5) ease of scaling.

Arlin, M. Teacher transitions can disrupt time flow in classrooms. American Educational Research Journal, 16(1): 42-56, Winter 1979.

Disruptive pupil behavior increased during teacher-initiated transition time as opposed to non-transitional time. Procedures for structuring transitions to increase time-on-task and maintain smoothness and momentum are described, and teachers' conceptions of time and classroom time flow are discussed.

Bloom, B. S. A new direction in education research: Alterable variables. Phi Delta Kappan, February 1980.

Bloom outlines three levels of learning time: allotted time, available time, and pupil engaged time. Most studies define student time-on-task as the proportion of the classroom period the student was engaged in direct task related behavior. Student achievement, interest and attitude in the subject relates positively to time-on-task.

Bloom, B. S. Time and learning. American Psychologist, September 1974.

Bloom cites various studies that correlate student achievement to quality educational time. The 1966 Coleman Report concluded that students in "more favored" schools attained in 8 years what students from "less favored" schools gained in 12 years, and yet all the students were attending school the same number of hours per day and days per year. Research conducted by Bloom resulted in the following: the multiple correlations of cognitive, affective and quality of instruction with achievement are .85 or higher; the multiple correlations of the preceding variables with time on task is about .75. Therefore, quality engaged time (time-on-task) is very important to student learning.

Comparison and identification. Time leader's guide. Basic skills instructional improvement program. Philadelphia, Pa.: Research for Better Schools, Inc., 1980. ERIC. ED 193 201.

The improvement of student engaged time leads to instructional improvement. This leader's guide teaches program participants how to: (1) compute student engaged time; (2) compare information collected with research findings; (3) identify opportunities for improvement; (4) set tentative goals for student engaged time, allocated time, and engagement rate. Instructional materials to be used in this program are included.

Guide, F., et al. Academic anxiety, time-on-task and achievement: A structural model. Paper presented at the annual meeting of the American Educational Research Association, Montreal 1983. ERIC. ED 228 290.

This study tested the hypothesis that anxiety debilitates students' attention span or time-on-task thus negatively affecting their achievement. Two instruments measured each of the three constructs. A structural equation model tested the association among the variables. The results confirmed the hypothesized negative association between anxiety and achievement and the positive relation between time-on-task and achievement. This finding is taken as evidence for the importance of time-on-task as a mediating variable between academic anxiety and reading achievement.

Kuceris, M. Time on the right task can boost student success. Executive Educator, 4(8): 17-19, 26, Aug. 1982.

To improve test scores and instructional quality, school districts in New Brunswick (New Jersey) and Adams County (Colorado) implemented programs to increase student time on task. Administrators introducing time on task programs should involve teachers and principals in planning, and provide support for necessary changes.

Kuceris, M. and Zakariya, S. (Eds.). Time on task: Using instructional time more effectively. Arlington, Va.: American Association of School Administrators, 1982. ERIC. ED 221 924.

According to this publication, a school's most effective tool in encouraging student success may be its control over the time the student spends working on goal-oriented learning activities -- that is, time on task. This document is intended to help school administrators understand the effects of their decisions on students' learning time and improve those decisions. An appendix provides suggestions on how to develop a program to increase time on task within a school district and includes a step-by-step checklist and observation forms.

McLaughlin, T. F., et al. A timer game: Effects for on-task behavior and generalization for academic behavior for an entire special education class. Contemporary Educational Psychology, 4(2): 172-74, April 1979.

This investigation determined if a timer, token reinforcement, and consequences for on-task behavior could increase academic output as well as on-task behavior of an entire special education class. The technique was effective in increasing both on-task behavior and generalizing its effects to academic output even 5, 15, or 25 days later.

Probst, D. A study of time on-task in three teachers' classrooms using different instructional modes. Report from the Project on Studies of Instructional Programming for the Individual Student. Madison: Wisconsin Univ. Research and Development Center for Individualized Schooling, 1980. ERIC. ED 196 905.

This study investigated differences occurring in student time utilization in three teachers' classrooms who used different instructional modes; large group, small group, and individualized. The subjects were 60 eighth grade students from a large urban middle school. Results of comparisons performed on time on task indicated that high and middle achievers spent significantly more time on task than low achievers.

Strother, D. B. Another look at time-on-task. Phi Delta Kappan, June 1984.

Karweit stated that giving students more time to study will not necessarily lead to increased learning; the issue is real or actual engaged task time. Strother suggests that in order to increase student learning, schools should "increase the proportion of active learning time within the time that is allowed for learning." The author offers several recommendations regarding organization of students, curriculum and teacher time that may prove beneficial to the teaching situation.

10. Enthusiasm

Allen, E. K. A study of the relationship of teacher enthusiasm to salient, selected variables influencing achievement in the vocational laboratory. Final Report. Philadelphia: Temple University, 1979. ERIC. ED 179 781.

Student variables studied in relationship to teacher enthusiasm were (1) attendance; (2) interest in school and in a particular subject; (3) educational motivation; and (4) student rating of vocational teachers. Forty-three teachers submitted two fifteen minute videotaped teaching sessions which were rated by trained observers. It was concluded that no significant correlation exists between teaching enthusiasm and the selected factors with the exception of student rating of instructors. The relationship between teacher enthusiasm and student achievement was not studied.

Bettencourt, E. M. et al. Effects of training teachers in enthusiasm on student achievement and attitudes. Paper presented at the annual meeting of the American Educational Research Association, Boston, 1980. ERIC. ED 194 592.

Seventeen first-year elementary teachers were randomly assigned to either an enthusiasm training treatment or a no training treatment. All teachers then taught a two week controlled unit in mathematics to their classes. Trained teachers increased significantly on eight indicators of enthusiasm compared with untrained teachers. However, students of trained and untrained teachers did not differ either on the achievement post-test or on the attitude scales. Further research is suggested.

Caruso, V. M. Teacher enthusiasm behaviors reported by teachers and students. Paper presented at the annual meeting of the American Educational Research Association, New York, 1982. ERIC. ED 217 038.

Enthusiastic and unenthusiastic teacher behaviors were identified by teachers and students in English and physical education classes. Participants agreed on five of the highest-ranked enthusiastic behaviors: participation, humour, encouragement, praise and momentum. Behavioral categories differed between teachers of English and physical education; behaviors emphasized by teachers and students in English focused on content delivery and classroom atmosphere, while teachers and students in physical education stressed personal interaction skills.

Gillet, M. and Gall, M. The effects of teacher enthusiasm on the at-task behavior of students in elementary grades, 1980. ERIC. ED 202 823.

This study tested the causal link between teacher enthusiasm and student achievement, using teaching as an independent variable and at-task behavior as a dependent variable in mathematic classes from the first to sixth grades. Experimental and control group teachers were video taped both before and after the two week training with observers recording pupils' at-task behaviors.

Teachers who had enthusiasm training showed a significant increase in level of enthusiasm, and that their pupils had a significantly higher at-task performance under both direct and indirect teacher influence.

Good, T. L. and Brophy, J. E. Looking in classrooms (3rd Ed.). New York: Harper & Row, 1984.

Good and Brophy define enthusiasm as "the extent to which the teacher displays interest, vitality, and involvement in subject and instruction" (p. 81). Costin, Greenough and Mengas (1971) state that even college students appreciate an enthusiastic presentation of curriculum and rate such instructors highly. The authors emphasize the fact that teachers are models. If the teacher is enthusiastic most of the students will display this behavior as well. Enthusiastic students achieve at higher levels because they are more attentive (Rosenshine, Furst, 1973).

Larkins, A. G. and McKinney, C. W. Two studies of the effects of teacher enthusiasm on social studies achievement of seventh grade students. Theory and Research in Social Education, 10(1): 27-41, Spring 1982.

Two studies examined the effect of teacher enthusiasm on the social studies achievement of seventh grade students. The first study was to determine whether three levels of teacher enthusiasm would produce corresponding differences in social studies achievement. The second study attempted to replicate the first.

McKinney, C. W. and Larkins, A. G. Effects of high, normal, and low teacher enthusiasm on secondary social studies achievement. Social Education, 46(4): 290-92, April 1982.

Five studies by the authors on the effects of teacher enthusiasm on secondary studies achievement are described. The results indicate that student not only can perceive differences in teacher enthusiasm, but that they prefer higher levels of enthusiasm and appear to learn more from lessons taught enthusiastically.

Rosenshine, B. Enthusiastic teaching: A research review. School Review, 78(4), August 1970.

This research review presents information regarding the relationship between pupil achievement and enthusiasm. It also specifies the behavioral components of enthusiasm. High and low inference, experimental and correlational studies are included. Collectively, the research defines an enthusiastic teacher as one who employs movements, gestures, variations in voice, and eye contact. Teachers must be aware of the distracting quality of over-animated lessons.

11. Clarity of Instruction

Cruickshank, D. R. Applying research on teacher clarity. Journal of Teacher Education, XXXVI(2): 44-47, March-April 1985.

Selected findings from the research on teacher clarity is highlighted. Cruickshank concludes that clarity is an important teacher attribute and that it relates, among other things, to learner achievement, learner satisfaction, and learner perception of teacher effectiveness. As such, it is recommended that clarity be used as one criterion in teacher evaluation.

Cruickshank, D. R., et al. Clear teaching: What is it? British Journal of Teacher Education, 5(1): 27-33, January 1979.

Three studies attempting to define teacher clarity are described. In each case students are asked to rate teacher behaviors in terms of clear or unclear behaviors. The results of each study indicate four categories of characteristics of teacher clarity: (1) assesses student learning; (2) provides student opportunity to learn; (3) uses examples; and (4) reviews and organizes.

Hines, C. V., et al. Measures of teacher clarity and their relationships to student achievement and satisfaction. Paper presented at the Annual meeting of the American Educational Research Association, New York, 1982. ERIC. ED 222 531.

The relationship between teacher clarity (as reflected by both low-inference and high-inference measures) and the student outcome measures of achievement and satisfaction were examined. Data on 32 preservice teachers, were provided by trained observers using the Teacher Clarity Observation Instrument as well as questionnaires completed by teachers and students. It was shown that there is a positive, highly significant, and substantial relationship between clear teaching behavior and student achievement and satisfaction when assessed within the context of a peer teaching laboratory situation.

Kennedy, J. J., et al. Additional investigations into the nature of teacher clarity. Journal of Educational Research, 72(1): 3-10, Sept-Oct. 1978.

This article reports on research instruments administered to junior high school students from Australia, Ohio, and Tennessee studying student responses to descriptions of selected teacher behaviors relating to teacher clarity. Two primary and two secondary factors that relate to teacher clarity are identified.

Land, M. L. and Denham, A. Effect of teacher clarity on student achievement. Paper presented at the annual meeting of the Southwest Educational Research Association, Houston, 1979. ERIC. ED 177 127.

The results of the experimental effect of low-inference teacher clarity variables on achievement and on retention were determined by means of a randomized

control group, posttest only, basic design. Members of an introductory education class viewed video tapes of lessons containing either high or low teacher clarity variables. Subjects who took a 30-item criterion test immediately after the viewing were compared to subjects who took a "delayed achievement" criterion test one week after viewing the tapes. Significant differences resulted for the main clarity effect and for the main effect of time-of-achievement. The interaction effect between clarity and time-of-achievement was not significant, i.e., there was no significant differential effect of level of teacher clarity on student retention.

Smith, L. R. Teacher clarifying behaviors: Effects on student achievement and perceptions. Journal of Experimental Education, 55(3): 162-169, 1985.

High school social studies students (N=448) were each assigned to one of 16 groups defined by possible combinations of two teacher uncertainty conditions (uncertainty vs. no certainty), two teacher "bluffing" conditions (bluffing vs. no bluffing), two lesson discontinuity conditions (discontinuity vs. no discontinuity), and two lecture notes conditions (notes handouts vs. no notes handouts). Each group was presented a lesson about the geography, politics, history, and economy of Botswana. The lessons were the same except for variations in the four conditions stated above. After the lesson, each group was tested on comprehension of the material, and then each group completed a lesson evaluation. This experimental study revealed that: teacher uncertainty negatively affected achievement; notes handouts positively affected achievement; and both teacher bluffing and lesson discontinuity negatively affected student evaluation of the lesson.

Land, M. L. and Smith, L. R. Low-inference teacher clarity variables: Effects on student achievement. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979. ERIC. ED 179 499.

A description is given of three studies on the effects of teacher clarity upon student achievement. Three low inference variables of teacher clarity -- vagueness terms, mazes, and additional unexplained content -- were selected for study. Eight lessons, scripted to be conducted by one teacher, each containing examples of lack of clarity, were observed. The results of these studies indicated a cause-effect relationship between teacher lack of clarity and student achievement. The effects in absolute terms, however, were small.

McCaleb, J. L., and White, J. A. Critical dimensions in evaluating teacher clarity. Journal of Classroom Interaction, 15(2): 27-30, Summer 1980.

An analysis of studies on teacher clarity reveals five components: (1) understanding; (2) structuring; (3) sequencing; (4) explaining; and (5) presenting. Three additional dimensions to be considered are rater qualifications, teacher dynamism, and student opportunity to learn.

Rosenshine, B. V. and Furst, N. Research on teacher performance criteria. In B. Othanel Smith (Ed.), Research in teacher education: A symposium. Englewood Cliffs, New Jersey: Prentice-Hall, 1971.

Rosenshine and Furst discuss the problems involved in defining clarity. However, studies that have been completed employing the researchers' operational definitions resulted in correlations between clarity and student achievement of .34 to .65.

Smith L. R., and Bramblett, G. H. The effect of teacher vagueness terms on student performance in high school biology. Journal of Research in Science Teaching, 18(4): 353-60, July 1981.

Analyzes a study which examined the effects of teacher vagueness on comprehension of high school biology students (N=48) regarding the vascular system of angiosperms. Includes the finding that teacher vagueness terms significantly affect student achievement and student perception of lesson effectiveness.

Smith, L. R. and Cotten, M. L. Effect of lesson vagueness and discontinuity on student achievement and attitudes. Journal of Educational Psychology, 72(5): 670-75, October 1980.

For seventh-grade mathematics students, lesson discontinuity and teacher vagueness terms significantly affected student achievement, and the interaction between continuity and vagueness was significant. Vagueness terms significantly influenced student perception of lesson effectiveness.

Smith, L. R., and Land, M. L. Low-inference verbal behaviors related to teachers clarity. Journal of Classroom Interaction, 17(1): 37-42, Winter 1981.

Two low-inference teacher clarity variables, vagueness terms and mazes, are discussed in terms of their effect on student achievement and on student perception of lesson effectiveness. Results indicate that high frequencies of teacher vagueness terms inhibit student achievement and cause students to perceive the lesson as ineffective.

12. Task Oriented/Businesslike Orientation

Brophy, J. E. and Good, T. L. Teacher behavior and student achievement. In M. Wittrock (Ed.), Handbook of research on teaching (3rd Ed.). New York: Macmillan, 1985.

Brophy and Good define businesslike and task-oriented teachers as those who "operated their classroom as learning environments, spending most time on academic activities." In research completed by the Texas Teacher Effectiveness Study, there exists a high correlation between student achievement and teacher businesslike behavior.

Gabrys, R. E. An analysis of the influence of a training intervention for business-like behavior on the business-like behavior and level of warmth of preservice elementary teachers. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979. ERIC. ED 171 681.

This study was designed to see if preservice elementary teachers having undergone a training intervention on business-like behavior can significantly increase their observable level of business-like behavior and maintain the level of increase ten weeks after training. The observed level of warmth was also monitored in relationship to the training intervention. The training intervention included classroom instruction, identification, and observation of business-like descriptors in classroom settings, role playing, peer teaching, and micro teaching. Significant results were obtained relative to the intervention, and non significant correlations found between business-like behavior and warmth.

Larson, R. Teacher performance evaluation - What are the key elements? NASSP Bulletin, February 1984.

Larson's brief opinion on teacher evaluation mentions several research studies completed on teacher effectiveness. One such study conducted in Iowa found that businesslike, task-oriented teachers achieved the greatest gains over a ten month period as indicated by the Iowa Test of Basic Skills.

Rosenshine, B. and Furst, N. Research on teacher performance criteria. In B. Othanel Smith (Ed.), Research in teacher education: A symposium. Englewood Cliffs, New Jersey: Prentice Hall, 1971.

Rosenshine and Furst mention several studies which have established that a positive relationship exists between student achievement and teachers' businesslike/task oriented behaviors. The authors suggest a high correlation is apparent because "you get what you teach for". Therefore, teachers with a high achievement focus develop high achieving students.

Smith, L. R. Task-Oriented lessons and student achievement. Journal of Educational Research, 73(1): 16-19, Sept.-Oct. 1979.

A high degree of classroom activity relevant to the lesson content positively influenced achievement in high school algebra lessons.

13. Variability of Instruction

Bailey, G. An evaluator's guide to diagnosing and analysing teaching styles.
NASSP Bulletin, February 1984.

Bailey's article presents definitions and examples of methodologies and instructional strategies. The author gives no empirical evidence but suggests that a teacher who employs a variety of instructional approaches is less likely to bore students; that students appreciate and enjoy changes in instructional presentation and as a result will be more attentive.

Rosenshine, B. and Furst, N. Research on teacher performance criteria. In B. Othanel Smith (Ed.), Research in teaching education: A symposium. Englewood, Cliffs, New Jersey: Prentice Hall, 1971.

Rosenshine and Furst present empirical data that form a positive association between variety of instructional materials, variety of tests and variety of teaching devices with student learning. Lea (1964) discovered that those teachers who employed more variety in their presentations had higher achieving students. Correlations ranging from .24 to .54 were achieved by Walberg (1969), Fortune (1967) and Torrance and Parent (1966) regarding variety in instruction and student achievement.

14. Flexibility

Brophy, J. E. and Good, T. L. Teacher behavior and student achievement. In M. Wittrock (Ed.), Handbook of research on teaching (3rd Ed.). New York: Macmillan, 1985.

Brophy and Good discuss flexibility as a teacher's behavior with regard to altering the presentation and content depending upon classroom variables. "Tailoring techniques to the situation" correlates positively with student attitude and achievement according to studies by Soar (1968) and Flanders (1970).

Martin, W. R. Teacher behaviors - Do they make a difference? A review of the research. Kappa Delta Phi Record, December 1979.

Martin's article reminds educators of the student's affective domain and the teacher's behavior in the affective domain. Aspy, et al found that students taught by teachers high in genuineness, respect and empathy showed a reading gain higher than those taught by teachers displaying these behaviors on a lower level. In order for a teacher to be flexible, one should know her/his pupils beyond their academic achievement level. Effective teachers will adjust to a variety of instructional situations, objectives and a variety of socio-economic backgrounds so that they can assist pupils to significant learning and personal growth.

Pupil's Behavior

15. Understanding of Instructional Goals

Good, T. L. and Brophy, J. E. Looking in classrooms (1st Ed.). New York: Harper and Row, 1973.

The level of student understanding of instructional goals is related to many teacher behaviors particularly teacher clarity, direct instruction, and teacher expectations. Students will have difficulty completing classroom tasks if the teacher has not been clear as to what those tasks should be. The goals of the daily lesson, unit and yearly content should be clear to the teacher, and the teacher must relate these goals adequately to the pupils.

16. Teacher Centred/Direct Instruction

Becher, R. M. Teacher behaviors related to the mathematical achievement of young children. Journal of Educational Research, 73(6): 336-40, July-Aug. 1980.

For four- and five-yearold lower socioeconomic status children learning basic mathematics, more indirect teacher behavior and the active involvement of the student in the learning process are significantly more effective in facilitating student achievement than is a direct instruction/passive reception learning mode.

Becker, W. C. Symposium on direct instruction: The Follow Through data show that some programs work better than others. Paper presented at the annual meeting of the American Educational Research Association, Toronto, 1978. ERIC. ED 173 363.

The National Evaluation significance data on the Follow-Through Planned Variation Experiment show that direction instruction outperformed other approaches on nearly all measures. Normative data for the direct instruction model in comparison to eight other major models show that the children in the former model are at or near national norms on all Metropolitan Achievement Test (MAT) measures at the end of the third grade. The conclusions drawn from these analyses are also supported by a reanalysis by Bereiter and Kurland.

Becker, W. C., and Gersten, R. A follow-up of Follow Through: The later effects of the direct instruction model on children in fifth and sixth grades. American Educational Research Journal, 19(1): 75-92, Spring 1982.

Low-income fifth and sixth graders who had completed the full three years of a first- through third-grade Direct Instruction Follow Through program were tested. Students appeared to retain the knowledge and problem-solving skills they had mastered in the primary grades.

Carnine, D. Direct instruction: A successful system for educationally high risk children. Journal of Curriculum Studies, 11(1): 29-45, Jan-Mar. 1979.

Explains how elementary school student achievement was improved by means of a direct instruction program involving reading and mathematics drilling, frequent low-level questions, high levels of teacher feedback, and instruction geared to the students' performance level.

Cicchelli, T. Forms and functions of instruction patterns: Direct and nondirect. Instructional Science, 12, 1983.

This article attempts to define direct and nondirect instruction from the literature and research completed on these topics. Direct instruction teaching

behaviors include: the teacher is the dominant leader of the class, questioning technique includes a majority of narrow, recall questions, and the teacher reinforcing right answers.

Cicchelli, T. Implementing the direct instruction pattern: A study with primary grade low SES children. Urban Education, 17(4): 419-30, January 1983.

Discusses the direct instruction pattern which is based on teacher-centered classroom organization, as a workable teaching style, especially among children of the lower class. Describes teacher behaviors involved in implementing this teaching style, and suggests the use of implementing this teaching style, and suggests the use of an observation instrument to monitor direct instruction behaviors.

Duffy, G. G., et al. Two styles of direct instruction in teaching second-grade reading and language arts: A descriptive study. East Lansing Michigan State Univ. Institute for Research on Teaching, 1981. ERIC. ED 212 996.

Two second grade teachers, each categorized as a proponent of direct instruction, were studied using descriptive techniques. Each teacher was observed daily for 7 days, interviewed twice, and maintained a daily journal about his or her teaching. These data were used to compile case studies of the two teachers. Analysis of the data revealed that, while both teachers were similar in some ways, they were quite different in their conception of instructional role, response to mandates, and use of commercial materials. The findings support the hypothesis that the term direct instruction can mean many things.

Evertson, C. M., et al. Relationships between classroom behaviors and student outcomes in junior high mathematics and English classes. American Educational Research Journal, 17(1): 43-60, Spring 1980.

Sixty-eight teachers (32 English and 29 mathematics) were observed in two of their class sections. Relationships among teaching behaviors and student outcomes in mathematics classes suggest that elements of both the direct instruction model and indirect influence model are supported. Results in English classes are less clear.

Fedigan, L. School based elements related to achievement: A review of the literature. Edmonton: Planning and Research Branch, Alberta Education, Fall 1978.

Flanders (1965, 1970) and Gage (1965) completed research in which teacher "indirectness" was a variable that related to student achievement. Flanders defined indirect teaching as that in which the teacher accepts students' feelings, praises and encourages, accepts student ideas, and asks questions. However, Sloan's 1973 review shows that low socio-economic status children respond academically and positively to a pattern of direct instruction as defined by Rosenshine. The studies in Fedigan's review suggest that teaching behavior

(direct or indirect) should depend upon student characteristics such as socio-economic status, age and/or previous ability.

Gersten, R. and Carnine, D. Direct instruction mathematics: A longitudinal evaluation of low-income elementary school students. The Elementary School Journal, 84(4), March 1984.

This article describes a direct instructional model that has been effective in teaching mathematics to low socio-economic status children. Gersten and Carnine employed a specific curriculum taught in rapidly-paced, small groups that emphasized a high success rate. The authors also present a system for monitoring both student and teacher performance.

Good, T. L. Teacher effectiveness in the elementary school. Journal of Teacher Education, 30(2): 52-64, Mar-Apr. 1979.

The concept of direct instruction in which the teacher sets and articulates goals, assesses student progress, and makes class presentations is presented along with a review of empirical research on which the concept is based and an assessment of its potential and limitations.

McFaul, S. A. An examination of direct instruction. Educational Leadership, 40(7): 67-69, April 1983.

Active, teacher-centered instruction is not necessarily effective with all students for all purposes.

Peterson, P. L. Direct instruction: Effective for what and for whom? Educational Leadership, 40(7): 67-69, April 1983.

Direct instruction is more effective for some purposes and students than for others. The approach used should depend on the type of student and the teacher's objectives.

Roehler, L. R. and Duffy, G. G. Matching direct instruction to reading outcomes. Language Arts, 49(5): 476-80, May 1982.

Examines four important outcomes of reading instruction -- to enjoy and appreciate reading, to understand reading's communication function, to find information, and to develop word recognition and comprehension strategies --and illustrates how direct instruction varies qualitatively from outcome to outcome.

Stennett, R. G. DISTAR reading program in junior opportunity classes: Phase III -- Impact of two full years of instruction. Special Education in Canada, 53(2): 7-10, Winter 1979.

A three-year controlled study of the feasibility and results of using the DISTAR (Direct Instruction System of Teaching and Remediation) reading program in junior opportunity classes was conducted with the following findings: 1) the DISTAR program can be successfully implemented in junior opportunity classes; 2) over a two-year period, students exposed to the DISTAR program improve their reading skills at a faster rate than students exposed to the traditional program; and 3) gains in reading skill made by the junior opportunity class students exposed to either DISTAR or traditional programs are quite modest.

Talmage, H. and Rasher, S. P. A study of the effects of three dimensions of instructional time on academic achievement. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, April 1979.

The study addressed two questions: 1) what is the relationship between teacher preparation time and achievement? and 2) how does the "extent of curriculum coverage" influence academic achievement? The authors studied 165 elementary school classes that were using a sequential nutritional education curriculum. The researchers found that an increased amount of direct instructional time was "positively related to higher posttest scores of students with low prior achievement." Students with high prior achievement, however, showed decreasing posttest scores with increasing direct instruction. Increased teacher planning time appeared to benefit students with high prior achievement and to hinder those with low prior achievement.

17. Praise and Encouragement/Criticism

Brimner, L. D. The effects of praise and blame on writing. English Journal, 71(1): 58-60, January 1982.

Reports on a study that indicated the development of unhealthy attitudes toward writing in students who received negative feedback.

Brophy, J. On praising effectively. Elementary School Journal, 81(5): 269-78, May 1981.

Reviews research on teachers' praise in the classroom and proposes specific guidelines for helping teachers praise effectively. Time, concentrated attention, and individualization of remarks according to the student and the situation are considered crucial factors in praising effectively.

Brophy, J. Teacher praise. A functional analysis. Review of Educational Research, 51(1): 5-32, Spring 1981.

Teacher praise typically does not function as a reinforcer. Rather, it is reactive to and under the control of student behavior. Its effects must be understood using concepts from attribution and social learning/reinforcement theories.

Curwin, R. Are your students addicted to praise? Instructor, 90(3): 61-62, October 1980.

The author asserts that students can get "hooked" on praise to the point that they limit their creativity and manipulate others in search of it. He notes that teachers too may use praise manipulatively. He suggests ways for kicking this habit, primarily through more objective reinforcement messages. Three educators respond.

Fedigan, L. School-based elements related to achievement: A review of the literature. Edmonton: Planning and Research Branch, Alberta Education, Fall 1978.

The Texas Teacher Effectiveness Studies conducted in the mid to late 1980s concluded that different teaching behaviors are successful with different pupils depending upon their ability, socio-economic background and other personal characteristics. The Texas researchers found that high socio-economic children responded more favorably to criticism and challenges than did low SES students.

Medley, D. M. The effectiveness of teachers. In P. L. Peterson and H. J. Walberg (Eds.), Research on teaching. Berkeley, CA: McCutchan, 1979.

Medley's review presents many studies that have been significant in the process-product approach to effective teaching. In part, the author discusses the long-term effects of education; the development of the individual as a total person. "Teachers are hired to educate children, to produce important, lasting changes in their behavior, not short-term changes in test scores." Praise and encouragement may be used to develop self-esteem and studies indicate praise to be an effective teaching behavior for low socio-economic students, but not related to student achievement of high socio-economic students.

Mukhopadhyay, S. and Chugh, A. Developing a strategy for minimizing underachievement through teacher classroom behavior, 1979. ERIC. ED 207 725. Microfiche only.

Elementary school teachers were trained in specific classroom behaviors designed to improve student achievement. The study also examined effects of teacher influence on school anxiety and classroom trust. Teachers were trained to provide more positive feedback, to understand the needs of underachievers, and to involve more students in classroom discussion. Results indicated that training led teachers to increase positive feedback with students and decrease negative feedback. Academic achievement improved for all but the overachievers, classroom trust increased, and school anxiety decreased.

Rosenshine, B. and Furst, N. Research on teacher performance criteria. In B. Othanel Smith (Ed.), Research in teacher education: A symposium. Englewood Cliffs, New Jersey: Prentice Hall, 1971.

Presents results from several studies that indicate a relationship between student achievement and criticism. Positive correlations were achieved by Harris and Serwer (1966) and Morsh (1956) but according to most studies, a negative correlation exists between criticism and student achievement. The extent of the negative correlation depends upon the extent of the criticism. Teachers who employ extreme forms and amounts of criticism usually have lower achieving students.

Salzberg, R. S., and Salzberg, C. L. Praise and corrective feedback in the remediation of incorrect left-hand positions of elementary string players. Journal of Research in Music Education, 29(2): 125-33, Summer 1981.

Subjects of the study were five elementary class students (grades 4-6) who consistently performed with incorrect left-hand positions. Although students varied in response to different teaching styles, praise was always as effective as corrective feedback in changing the left-hand position and more durable in its effectiveness.

Stringer, B. R., and Hurt, H. T. To praise or not to praise: Factors to consider before utilizing praise as a reinforcing device in the classroom communication process. Paper presented at the annual meeting of the Southern Speech Communication Association, Austin, 1981. ERIC. ED 202 054.

For praise to have a positive effect on a child's achievement, teachers must be aware of some important research findings. Research in the past two decades has indicated more consistently that positive verbal reinforcement leads to improved achievement. Praise results in improved achievement only when it is congruent with student needs. Researchers are examining the relationship between praise and behavior, with studies indicating that praise reinforces appropriate classroom behavior and inappropriate behavior can best be controlled by ignoring it rather than punishing it.

Woolfolk, A. E. Student learning and performance under varying conditions of teacher verbal and non-verbal evaluative communication. Journal of Educational Psychology, 70(1): 87-94, February 1978.

Teachers presented four behavioral combinations -- (1) verbally and non-verbally positive; (2) verbally positive and non-verbally negative; (3) verbally negative and non-verbally positive; or (4) verbally and non-verbally negative -- to sixth grade students. Negative non-verbal behavior led to significantly greater performance. Teacher gender and student gender, and teacher's verbal behavior also influenced learning.

Workman, E. A., et al. The consultative merits of praise-ignore versus praise-reprimand instruction. Journal of School Psychology, 18(4): 373-80, Winter 1980.

Compared the effects of two behavior management strategies. More rapid and slightly greater improvement was achieved under the praise-soft reprimand combination than under the praise-ignore combination. Improvement in behavior diminished less rapidly in the reversals following the praise-ignore phases.

18. Individualization of Instruction

Good, T. L. and Brophy J. E. Looking at classrooms. New York: Harper and Row, 1973.

Good and Brophy discuss the use of individualized instruction depending upon the subject matter, teaching style, available resources, and student characteristics. Students who complete assignments more rapidly than others are often punished indirectly by being assigned more of the same work. The authors suggest many activities that will reward students who complete their work faster, such as learning centres and peer tutoring.

Slavin, R. E., Leavey, M. B., and Madden, N. A. Combining co-operative learning and individualized instruction: Effects on student mathematics achievement, attitudes and behaviors. The Elementary School Journal, March 1984.

Slavin, et al conducted two studies comparing team-assisted individualized learning, individualized instruction and traditional learning. Students were randomly selected for the three instructional programs from grades 3, 4 and 5. Student achievement, attitudes and behaviors were compared between the three groups. Results indicated that for the sample students, team individualized instruction was the most successful program with individualized instruction following second.

19. Questioning Techniques

Andre, T. Does answering higher level questions while reading facilitate productive learning? Review of Educational Research, 49(2): 280-318, Spring 1979.

Research on levels of questioning and their effects on learning is reviewed. It is shown that higher level questions facilitate reproductive and productive knowledge, but the reasons why are not clearly understood. An information processing model which accounts for question level effects is discussed.

Batson, A. D. Questioning: A reading/thinking foundation for the gifted. Paper presented at the annual meeting of the Southwest Regional Conference of the International Reading Association, San Antonio, 1981. ERIC. ED 201 999.

A study to determine the effects of higher level interactive questioning procedures on the cognitive abilities of gifted students was conducted with 14 gifted sixth grade students. The randomly assigned experimental group (both groups met for five weekly sessions) experienced a combination teaching strategy that included: (1) a personal graph on which students recorded the types of questions they asked or answered — recall, think critically, think creatively, and evaluate; (2) focused teacher preparation of questions; (3) student initiated questions; (4) plateaus strategy; and (5) emphasis on process rather than on number of correct answers. Pretest and Posttest scores on the Ross Test of Higher Cognitive Processes demonstrate that the higher cognitive processes used by the experimental students improved in the areas of sequencing and questioning strategies.

Bozsik, B. E. A study of teacher questioning and student response interaction during pre story and post story portions of reading comprehension lessons. Paper presented at the annual meeting of the American Educational Research Association, New York, 1982. ERIC. ED 215 294. Microfiche only.

The study examined the types of questions teachers (four preservice and four inservice) asked, the types of responses, the wait-time provided for high- and low-ability reading groups, and the discussion time provided high- and low-ability groups of reading comprehension lessons. The teachers were observed for six weeks, using the Question - Response - Interaction (QRI) instrument. The results showed that both types of teachers tended to pose more textually explicit questions to the low-ability group. The high-ability groups had more discussion time, received more textually implicit and raising type questions, and provided more supported responses. More wait-time between questions was accorded the high-ability group than the low-ability group, and more wait-time was given to pre-story portions than post-story portions of the reading lessons. There were minimal differences between preservice and inservice teachers regarding wait-time.

Crowell, D. C., and Hu-pei Au, K. A scale of questions to guide comprehension instruction. Reading Teacher, 34(4): 389-93, January 1981.

Presents evidence for the validity of a scale of questions that reflects levels of difficulty in reading comprehension.

Daines, D. Teachers' oral questions and subsequent verbal behaviors of teachers and students, 1982. ERIC. ED 225 979.

A portable minicomputer collected data about elementary and secondary social studies teachers' oral questions and the subsequent verbal behaviors of the teachers and the students. Data indicate that literal types of questions were posed most often by teachers at the rate of 1.5 per minute, and the duration of the students' answers was associated with the cognitive levels of the questions asked by the teacher. Teachers spent an average of 40% of the lesson time giving direct instructions to students and 20% on non instruction activities. Teachers asked low level questions. It is recommended that the skills of asking higher level thinking questions should be practised by teachers and that coaching be made available to increase these skills.

Dillon, J. T. Cognitive correspondence between question/statement and response. American Educational Research Journal, 19(4): 540-52, Winter 1982.

Analysis of teacher-student exchanges in high school discussion classes revealed that only half of all students' responses exhibited the same cognitive level as the teacher's intervention. The findings are compared to previous studies which together offer little support for the notion of cognitive correspondence between question and answer.

Dillon, J. T. To question and not to question during discussions: I. Questioning and discussion. Journal of Teacher Education, 32(5): 51-55, Sept.-Oct. 1981.

Questioning techniques are used in the classroom to initiate discussion and to exert teacher control over the class. However, question-answer relationships appear to foster respondent dependency and passivity. It is recommended that the teacher question only when he or she is perplexed and in need of information.

Dillon, J. T. To question and not to question during discussion: II. Non-Questioning techniques. Journal of Teacher Education, 32(6): 15-20, Nov-Dec. 1981.

The second in a series of articles focuses on the most effective nonquestioning techniques. Alternatives to questioning are given.

Donlan, D. and Singer, H. Active comprehension of short stories. Paper presented at the annual meeting of the Claremont Reading Conference. Claremont, Ca., 1979. ERIC. ED 170 705.

Three methods of preposed questioning aimed at improving student comprehension of short stories with a group of high school students is presented. It was found that when teachers preposed questions (a popular technique) comprehension tended to be narrowed because students focused on passages related to the preposed questions and that students attempted to satisfy the teacher's purpose in reading rather than their own. Best results were found with the schema self-preposed techniques in which students generated preposed, story-specific questions based on a schema of content-general questions.

Fedigan, L. School-based elements related to achievement. A review of the literature. Edmonton: Planning and Research Branch, Alberta Education, Fall 1978.

Fedigan presents studies that relate questioning techniques to the types of students and the subject matter. Evertson and Brophy have discovered that language arts teachers use more opinion and divergent questions whereas mathematics teachers ask more process, convergent questions. The Texas group suggest that successful questioning techniques will vary depending upon the grade levels of the students - as the students ages, there exists a positive correlation between probing, divergent questions and achievement. High socio-economic level students respond more favorably to indirect questioning techniques compared to low SES students.

Finkelstein, J. M. and Ritter, V. F. Does anyone have any questions? 1980. ERIC. ED 188 768.

The purpose of the study was to determine if answering a child's question with a question produces further analytical questioning by the child. A sample of 80 children in nursery-kindergarten, first, second and third grades (ages ranging from 4-9 years) were divided into two groups. Group A children's responses were followed by questions from the interviewer. Children in Group B were responded to with positive statements. Findings indicate that, in comparison to positive replies, a teacher's questioning reply to a child's question does not produce increases in children's questioning behavior. It is suggested that age may be a factor. A relationship between the responses of the interviewer and the level of the child's questions was found. When the interviewer replied with a question, the child responded with a higher level question.

Gambrell, L. B. Think-Time: Implications for reading instruction. Reading Teacher, 34(2): 143-46, Nov. 1980.

Argues that allowing students five seconds to think about a question both before and after they answer it, improves the quality of the answers they give.

Gooding C. T. and Swift J. N. Modifying teacher questioning behavior in classroom interaction. Paper presented at the annual meeting of the Eastern Educational Research Association, West Palm Beach, 1982. ERIC. ED 214 769.

This project investigated the effects of increasing teachers' wait times on general questioning skills in science teaching. Variables were separated through the use of four treatment groups, each containing ten science teachers. A comparison group received no instruction. Treatment effects were maximized at the project's fifth week, and diminished as the school year's end approached. The greatest behavioral change noted in the analysis was the increase in the amount of total classroom discussion time with active student participation.

Graves, D. H., and Giacobbe, M. E. Research update: Questions for teachers who wonder if their writers change. Language Arts, 49(5): 495-503, May 1982.

Reports on two case studies of writing development in the primary grades. Notes the impact of teacher's questioning techniques on student development as writers and on teacher ability to evaluate student progress.

Holliday, W. G. Overprompting science students using adjunct study questions. Journal of Research in Science Teaching, 20(3): 195-201, March 1983.

The selective attention model was used to explain effects of overprompting students (N=170) provided with study questions adjunct to a complex flow diagram describing scientific cyclical schema. Strongly prompting students to answers of questions was less effective than an unprompted question treatment, suggesting that prompting techniques be used with extreme caution.

Honea, Jr. J. M. Wait-Time as an instructional variable: An influence on teacher and student. Clearing House, 56(4): 167-70, Dec. 1982.

Results of a study show that increasing the amount of time teachers allow for students to answer questions produces a number of positive results, including (1) increases in the length of student response, (2) increases in the number of unsolicited responses, and (3) improvement in student-to-student interaction.

Mahlis, M. and D'Angelo, K. Teacher questions: An experimental analysis of the question effect hypothesis. Paper presented at the annual meeting of the association of teacher educators, Orlando, 1983. ERIC. ED 227 062.

A study examined the effects of three types of teacher questions (literal, interpretive, applied) on: (1) frequency, length, and quality of student responses; (2) classroom interaction; (3) student questions; (4) intentional and incidental learning; and (5) student attitudes. Findings implied that the kinds of questions teachers ask directly influence the nature of student answers, both in length and in type, and that applied questions lead to greater amounts of feedback during

classroom interaction. Some predictability in achievement can be afforded by altering question types, and higher level questions positively influence higher level achievement. Different question types may not differentially affect student attitudes toward the teacher or lesson.

McKenzie, G. R., and Henry, M. Effects of testlike events on on-task behavior, test anxiety, and achievement in a classroom rule-learning task. Journal of Educational Psychology, 71(3): 370-74, June 1979.

The effects of questions on attention and achievement were studied. Children were exposed to the same lesson and questions. Control subjects were called upon randomly, and experimental subjects were asked to indicate responses to every question with a nonverbal gesture. Questions addressed to individuals were less effective than questions used as test-like events.

Redfield D. L. and Rousseau, E. W. A meta-analysis of experimental research on teacher questioning behavior. Review of Educational Research, 51(2): 237-45, Summer 1981.

The meta-analytic technique was used to synthesize experimental research findings on the relationship between level of teacher questioning and student achievement. Results show that gains in achievement can be expected when higher cognitive questions assume a predominant role during classroom instruction.

Riley, II. J. P. A comparison of three methods of improving preservice science teachers' questioning knowledge and attitudes toward questioning. Journal of Research in Science Teaching, 17(5): 419-24, Sept. 1980.

Evaluated the comparative efficacy of the three most popular classification systems in terms of preservice elementary teachers' ability to classify questions and their attitudes toward questioning. The classification schemes used were those of Aschner, Bloom, and Sanders. Advantages of the Aschner-based system are discussed.

Rucker, G. H. The teacher questioning measure, 1980. ERIC. ED 190 525.

The Teacher Questioning Measure (TQM) was developed to give the student teacher supervisor an objective means of evaluating the questions asked by the student teachers. This instrument was designed to measure six areas of cognitive skills: knowledge, comprehension, application, analysis, synthesis, and evaluation. Questions are measured on a scale from low levels of cognition, through progressive stages to questions requiring high level creative thinking. A description is given of how to use the TQM in observing student teachers and how to analyze results.

Sloan, L. V. and Toews, R. J. Good questioning techniques. The Canadian School Executive, March 1984.

Sloan and Toews suggest that a teacher who employs a variety of good questioning techniques will elicit responses from all students. The use of pauses after framing questions, feedback, and high/low order questions will encourage complete class participation. The authors list positive questioning behaviors (based on Hunter and Bloom) and desired outcomes.

Swift, J. N. Wait time and questioning skills of middle school science teachers. Final Technical Report. New York: New York State Univ. System, 1982. ERIC. ED 220 276.

This investigation focused on teachers' questioning skills and use of wait time. Forty experienced middle school science teachers were divided into 4 treatment groups of 10 teachers each. One group served as the comparison group and received neither instructions nor the electronic feedback device. The two groups using the electronic feedback device increased their wait time, used greater numbers of high level questions, and received more contributions from students as measured by length of answers, frequency of volunteered contributions, numbers of student relevant words, and percentages of student talk.

Tobin, K. G. The effect of an extended teacher wait-time on science achievement. Journal of Research in Science Teaching, 17(5): 469-75, Sept. 1980.

Investigated the effects of variation in teacher wait-time on science achievement for students (N = 733) in 11 Australian middle schools. Conclusions provide evidence that the extension of teacher wait-time produces desirable changes in achievement.

AUDIO - VISUAL AND INSERVICE MATERIALS

1. Plans, Organization, and Implementation

Analyzing Learning Outcomes

1 filmstrip, 1 sound cassette, 1 booklet: 1977

In this program, techniques of task analysis are applied to learning objectives. Practice is provided so that an operation objective can be analyzed into subtests, designated as either entry or enroute skills. Use of a particular strategy is advocated in which instruction is approached in terms of learners' response rather than teacher presentations. Available: Library Services

Conceptualizing the Process of Instruction

1 film reel (8 min.), 2 teacher's guides, 31 booklets, 1 overview, 1 evaluation report: 1972

The materials in this kit are designed to assist teachers in analyzing and categorizing variables which occur in instructional situations. Available: Library Services

Essentially Yours: Content Selection

1 videocassette (13 min.), (Essentially yours series): 1972

Examines the criteria used as a base for content selection in a study unit. Available: Library Services

Essentially Yours: Evaluation

1 videocassette, (Essentially yours series): 1972

Reflects three major ambitions: to develop an effective means of communicating to the classroom teacher the essence of planning instruction for students, to experiment with a system on ways of supporting the continuing education needs of teachers, and to change, while improvising. Available: Library Services

Essentially Yours: Generalizing

1 videocassette (13 min.), (Essentially yours series): 1972

Shows how a teacher should be able to design learning activities which develop the children's ability to generalize. Available: Library Services

Essentially Yours: Openers

1 videocassette (15 min.), (Essentially yours series): 1972

Develops the definition of 'openers,' as an integral part of the study unit. Available: Library Services

Essentially Yours: Teaching-Learning Strategies

1 videocassette (18 min.), (Essentially yours series): 1972

Identifies learning-inquiry operations, data gathering, data organization, data using, and presents teaching-learning strategies for students skill development in the study unit. Available: Library Services

Evaluating and Reporting Student Progress

1 filmstrip, 1 audiotape, 1 booklet: 1973

This kit takes a look at the evaluation of the student, provides evaluation guidelines, samples of report cards, and takes a look at providing incentives for students. (Model Schools Project) Available: Library Services

Evaluation

1 filmstrip, 1 sound cassette, 1 booklet: 1977

This program discusses a rigorous system for assessment of teaching. Test construction, item sampling, and interpretation of student performance data are given attention, and the critical role of preassessment of learner competency is emphasized. The viewer learns to select and construct test items appropriate to given objectives, to design both formal and informal pre-assessment procedures, and to make appropriate inferences regarding instruction based on data obtained from his students. Available: Library Services

The Impact of the Classroom Environment

1 film reel (17 min.): 1979

This film looks at the physical and emotional environment that a teacher can create in a classroom. It describes how the teacher uses the students and the space to create a particular environment. In addition, it describes how a teacher uses these items to create security for the student and increase the students' environment. Available: Library Services

Instructional Tactics for Affective Goals

1 filmstrip, 1 sound cassette, 1 booklet: 197?

Operating on the assumption that effective instructional goals are perhaps the most important that classroom teachers can accomplish, this program describes the general nature of three instructional tactics which are particularly useful for promoting the attainment of affective goals; specifically, modeling, contiguity, and reinforcement. Available: Library Services

Lesson Organization

1 videocassette (28 min., 39 sec.): 1980

In this tape we see the teacher, Mary Ann Gillese-Schmidt, and her Grade 10 English class at Austin O'Brien High School. The student is to look for the following characteristics of a well organized lesson: review, orientation to task, stated objectives, signals of transition, emphasis, clarity comprehension checking, personal organization and summary of the lesson. Available: University of Alberta

Mondays, Marbles, and Chalk

8 videotapes (3/4" VHS - each approx. 50 min.), workbooks, leader manuals: 1984?

This participatory series of eight video programs is designed specifically to help enhance and improve elementary school teachers' class management and discipline techniques. The tapes examine management strategies (preventive, supportive, corrective), personal and professional role use in the classroom, classroom climate, the child's basic human needs, family relationships and home atmosphere as a shared staff responsibility. Available: Marlin Motion Pictures, Ltd.

Organizing Facts to Teach Meaningful Relationships

1 film reel (15 min.), 2 teachers' guides, 31 booklets, 1 overview, 1 evaluation report: 1972

The film and related materials in this kit present the viewer with questions and two classroom situations intended to produce understanding of strategies involved in teaching for concept development and other forms of higher level learning. It also attempts to assist recognition by teachers of any new knowledge structures which have been attained by learners. Available: Library Services

3. Teacher's Expectations

What the Teacher Expects

1 film reel (27 min.): n.d.

Dr. Rosenthal (Harvard) and Dr. S. Rabensvitch (McGill) discuss the importance and application of "self-fulfilling prophecy": that which is expected of a person is that which he will perform according to. Experiments with students in teaching-reading combined with teacher expectations provide the basis for a panel in which teachers discuss expectations and performance. Available: Library Services

4. Teacher's Awareness

Body Language in Classroom

1 film reel (16 min.): 1973

The film moves from the general description of body language to classroom use of body language. The teachers used are effective users of body language to further their effectiveness as teachers. Some tips on the use of body language are given. Available: Library Services

Withitness (Junior High)

1 videocassette (20 min., 38 sec.): 1980

Withitness is a classroom management concept that is based on the principle that teachers who are aware of what is going on in their classrooms are more likely to have their students engaged in on-task behavior and less likely to be engaged in deviant behavior. This tape shows four behavior indicators of withitness: desist, concurrent praise, suggest alternate behavior, description of desirable behavior. The tape is an edited version of a lesson taught by Mrs. Louise Covey of D.S. MacKenzie Junior High School, Edmonton. Available: University of Alberta

Withitness (Elementary School)

1 videocassette (20 min., 4 sec.): 1980

Withitness is a classroom management concept that is based on the principle that teachers who are aware of what is going on in their classroom are more likely to have their students engaged in on-task behavior and less likely to be engaged in deviant behavior. This tape shows four behavior indicators of withitness: desist, concurrent praise, suggest alternate behavior, description of desirable behavior. The tape is an edited version of a lesson taught by Mrs. Darlene Hernstedt, John Barnett Elementary School, Edmonton. Available: University of Alberta

7. Classroom Management

Assertive Discipline in the Classroom

1 film reel (29 min.): 1978

This film describes an effective plan for establishing discipline in the classroom. Based on a system of rewards rather than a series of punishments, with a plan of implementation for the classroom, the assertive discipline program creates a controllable teaching environment. Available: Library Services

Behavior Management Procedures for the Classroom

1 videocassette (14 min., 45 sec.): 1979

Dr. Larry MacDonald presents four behavior-management procedures and their components. The four procedures are Praise, Ignore, Disapproval, and Time-Out. A negative example of each procedure is shown and discussed in light of its components and then a positive example of the procedure is demonstrated. The examples are from a classroom at the Evelyn Unger School for Language and Learning Development with teacher Karen Baine. Available: University of Alberta

Behavior Modifications in the Classroom

1 film reel (25 min.): 1970

This film studies several children in elementary and a class in junior high who are experiencing behavior problems. An analysis of the children's problems and teacher behavior as well as a follow-through to a program of changing teacher response and the reinforcement of desirable behavior is examined. Ways of motivating individuals in the classroom environment are discussed by teachers involved in this program. Available: Library Services

Behavioral Case Management

1 videocassette (23 min.): 1976

This tape suggests and illustrates a four step procedure for managing behavior problems. The first step, Information Gathering, is sub-divided into six sections; generating a behavioral check list; doing medical and informal questioning. The second section involves Diagnosis and in this case, the selection of a token economy program as an appropriate corrective measure. Proper Programming for the token economy is the third step and good follow-up is the fourth. This program was prepared and narrated by the counsellor, Lloyd Allen. Available: University of Alberta

Glasser on Discipline

1 film reel (28 min.): 1972

Dr. William Glasser describes in a lecture his views on what discipline should be. He feels that an undisciplined child is the result of a lack of knowledge of the child's needs, capabilities, wants and desires. This film describes in good detail the methods used to implement this approach. Available: Library Services

Glasser on Schools

1 film reel (19 min.): 1978

This is an introduction to Dr. William Glasser's no-failure approach to education. The film offers insights into typical school problems and why they exist. It also deals seriously with the matter of failure in school and what to do about it. Available: Library Services

Learner Accountability

1 videocassette (18 min., 3 sec.): 1980

Learner Accountability is a concept in classroom management. If the teacher makes children accountable for their learning, there is greater pupil involvement in work and less deviant behavior. This videotape shows three behavioral indicators of learner accountability; goal directed prompts, work showing and peer involvement. The tape shows an edited version of a Grade 9 language arts class at Woodhaven Jr. High school, Spruce Grove, Alberta, taught by Mr. Chuck Allen. Available: University of Alberta

Protocol modules on classroom management (Overview). Description of Teacher Inservice Education Materials, 1977. ERIC. ED 167 546.

These protocol modules on classroom management includes set of 4 16mm films, 1 Instructor's Manual and one copy of each of the four student manuals on the four areas covered: 1) Group Alerting; 2) Learning Accountability; 3) Transitions; 4) Withitness. This material has been tested and is used by the University of South Florida with their graduate students in education. Available: National Education Association. Project on Utilization of Inservice R & D Outcomes.

8. Feedback to Pupils

Effective Communication Skills #1: Paraphrasing

1 videocassette (25 min., 56 sec.): 1977

Ken McMillan, a graduate student in Educational Psychology, defines the term 'Paraphrasing' and introduces examples of how it is used to show interest in what is said and if a statement is understood correctly. Mrs. Sigrid Hundleby, a graduate student in Educational Psychology responds to stories and short statements by upper elementary students, in an effort to show the viewer of this videotape how paraphrasing works effectively in promoting interpersonal communication. The viewer is also given a chance to paraphrase statements made by students without the added responses of Mrs. Hundleby. This tape is one of a series of three tapes on effective communication skills. The other programs are 'Reflection of Feelings' and 'Open-ended Questions.' Available: University of Alberta

Effective Communication Skills #2: Reflection on Feelings

1 videocassette (26 min., 47 sec.): 1977

Ken McMillan, a graduate student in Educational Psychology, defines the term 'Reflection of Feelings' and introduces examples of how it is used to show persons you are aware of their feelings and are understanding their statements. Mrs. Sigrid Hundleby, a graduate student in Educational Psychology responds to stories and short statements by upper elementary students, in an effort to show the viewer of this videotape how reflection of feelings works effectively in promoting interpersonal communication. The viewer is also given a chance to use reflection of feelings with statements made by students without the added responses of Mrs. Hundleby. This tape is one of a series of three tapes on effective communication skills. The other programs are 'Paraphrasing' and 'Open-ended Questions.' Available: University of Alberta

Effective Communication Skills #3: Open-Ended Questions

1 videocassette (24 min. 43 sec.): 1977

Ken McMillan, a graduate student in Educational Psychology, defines the term "Open-ended Questions" and introduces examples of how it is used to encourage a person to keep talking without interrupting him. Mrs. Sigrid Hundleby, a graduate student in Educational Psychology responds to stories and short statements by upper elementary students in an effort to show the viewer of this videotape how open-ended questions work effectively in promoting interpersonal communication. The viewer is also given a chance to use open-ended questions without the added responses of Mrs. Hundleby. This tape is one of a series of three tapes on effective communication skills. The other programs are "Reflection of Feelings" and "Paraphrasing." Available: University of Alberta

Fair Verbal Behavior

1 film reel (15 mn.), 2 teachers' guides, 1 overview, 31 booklets, 1 evaluation report: 1972

The film in this kit presents two contrasting classroom situations relating to fair verbal behavior. The materials are designed to assist teachers in analyzing both the existence and the effects of fair and unfair verbal behavior. Available: Library Service

Praise and Corrective Feedback

1 videocassette (18 min., 35 sec.): 1980

The quality of classroom interaction can be improved by the teacher's use of praise and corrective feedback. Two techniques of praise, verbal and nonverbal, and four techniques of corrective feedback; cueing, giving directions, maintaining responses, and probing; are exemplified in this lesson taught by Bob Bowen at Grace Martin Elementary School, Edmonton. Available: University of Alberta

Verbal interaction in the Cognitive Dimension

1 film reel (15 min.), 1 teacher's guide, 30 booklets, 1 overview, 1 evaluation report: 1972

This kit attempts to help teachers recognize the characteristics of verbal interaction; to identify a unit of analysis; to differentiate between teacher verbal behaviors that are task-oriented and those that are role-expectancy-oriented. In addition, the material tries to help them differentiate generally between study responses that are productive and those that reproduce the teacher's behavior; to hypothesize relationships between teacher verbal behaviors and student responses; and to recognize and be able to analyze teacher openness as a variable in interaction. Available: Library Services

11. Clarity of Instruction

Clarity and Emphasis

1 videocassette (19 min., 44 sec.): 1980

A teacher's use of language can affect pupil achievement. Two concepts relating to teacher language are clarity and emphasis. This videotape shows a teacher displaying two behavioral indicators for clarity - defining new words and using precise language and three behavioral indicators for emphasis - modulating one's voice, paraphrasing, emphasizing. The teacher is Mr. Dan Green at McKee Elementary School, Edmonton. Available: University of Alberta

17. Praise and Encouragement/Criticism

Praise and Corrective Feedback

The quality of classroom interaction can be improved by the teacher's use of praise and corrective feedback. Two techniques of praise, verbal and nonverbal, and four techniques of corrective feedback; cueing, giving directions, maintaining responses, and probing; are exemplified in this lesson taught by Bob Bowen at Grace Martin Elementary School, Edmonton. Available: University of Alberta

19. Questioning Techniques

Effective Communication Skills #3: Open-Ended Questions

1 videocassette (24 min. 43 sec.): 1977

Ken McMillan, a graduate student in Educational Psychology, defines the term "Open-ended Questions" and introduces examples of how it is used to encourage a person to keep talking without interrupting him. Mrs. Sigrid Hundleby, a graduate student in Educational Psychology responds to stories and short statements by upper elementary students in an effort to show the viewer of this videotape how open-ended questions work effectively in promoting interpersonal communication. The viewer is also given a chance to use open-ended questions without the added responses of Mrs. Hundleby. This tape is one of a series of three tapes on effective communication skills. The other program are "Reflection of Feelings" and "Paraphrasing." Available: University of Alberta

Essentially Yours: Concept Development

1 videocassette (20 min.), (Essentially yours series): 1972

Examines concept formation and the importance of questioning, cautions in concept development. Available: Library Services

Levels of Questioning

1 videocassette (25 min., 9 sec.): 1980

In this tape we see Mrs. Mary Ann Gilese-Schmidt and her English 30 class at Austin O'Brien High School. Using a lesson on essays we see her using and sequencing lower order questions involving memory, and higher order questions, which call on the student to translate, interpret, apply, analyze, synthesize, and evaluation. Available: University of Alberta

Effective questioning: Elementary level (Minicourse 1). Description of teacher inservice education materials, 1976. ERIC. ED 167 531.

A description of an inservice self-instructional minicourse intended to give teachers knowledge of and practice on using specific questioning techniques that increase students' participation and learning during class discussion. The classroom techniques include redirection, refocusing, handling incorrect responses, pausing, using higher cognitive questions, asking for clarification, and reducing teacher behavior that interferes with the flow of class discussion. Information is provided on the purposes and content of the course and materials as well as activities and resources. Available: National Education Association. Project on Utilization of Inservice Education R & D. Outcomes.

Effective questioning techniques (Implementive Module 3). Description of teacher inservice education materials, 1977. ERIC. ED 166 189.

The inservice learning module described here focuses on testing the teacher's understanding of and skill in using effective questioning techniques in the classroom. Inservice topics addressed include methods of verbal and non verbal accepting or encouraging; probing techniques; and methods of asking effective questions. This description provides information on the purposes and content of the module as well as activities and resources. Available: National Education Association. Project on Utilization of Inservice Education R & D Outcomes.

Higher cognitive questioning (Minicourse 9). Description of teacher inservice education materials, 1976. ERIC. ED 167 530.

The teacher inservice minicourse described here is designed to increase the teacher's use of higher cognitive questions, which helps develop student ability to think and is primarily concerned with analysis, synthesis, and evaluation questions. Information is provided on the purposes and content of the course and materials as well as activities and resources involved. Available: National Education Association. Project on Utilization of Inservice Education R & D Outcomes.

Questioning skills (Cluster V; 5 Modules -- A Summary). Description of teacher inservice education materials, March, 1977. ERIC. ED 169 064.

The described learning module is designed for teachers and educators who wish to improve their techniques of inquiry and questioning. The scope and sequencing of topics are described as well as the activities and resources involved in its use. Ordering information is provided, and a critique of the module is included. Available: National Education Association. Project on Utilization of Inservice Education R & D Outcomes.

Questioning that turns students on rather than off. Description of teacher inservice education materials, February, 1977. ERIC. ED 171 685.

The programmed materials for inservice teacher education described in this document are designed to make the teacher think about questioning techniques and learn some of the principles of good questioning procedures. The program is designed as a home study course. This report provides further information on the purposes and content of the program as well as activities and resources involved. A critique, history of development, and ordering information are also included. Available: National Education Association. Project on Utilization of Inservice Education R & D Outcomes.

The user of higher level questions (Module 2). Description of teacher inservice education materials, 1977. ERIC. ED 169 002.

The learning module described is designed for preservice and inservice classroom teachers interested in improving their questioning skills. It may be used by teachers at all grade levels. The scope and content of the module are outlined, and the activities and resources involved in its use are described. A critique of the module and ordering information are also included. Available: National Education Association. Project on Utilization of Inservice Education R & D Outcomes.

The use of questioning in social studies. Description of teacher inservice education materials, 1977. ERIC. ED 169 063.

The intent of the teacher education learning module described here is to increase the user's competency in asking questions that will stimulate higher levels of thinking and learning. Seven specific categories are outlined. The focus is on approaches to thorough and thought-provoking questioning, strategies for analyzing the nature of questions, and coordinating a progressive questioning structure. This descriptive report provides further information on the purposes and content of the program as well as activities and resources involved. Available: National Education Association. Project on Utilization of Inservice Education R & D Outcomes.

Questioning Strategies

1 videocassette (21 min., 44 sec.): 1980

In this tape we see Mr. Dan Green and his grade six class at McKee Elementary School in Edmonton. The tape presents various questioning strategies; positive questioning, personal questions, refocusing, redirection and soliciting feedback. Available: University of Alberta

INFORMATION RE: AUDIO-VISUAL MATERIALS

ACCESS Network. Dubbing Centre, 295 Midpark Way, South East, Calgary, Alberta, T2N 4J8. (256 - 1100)

Agency for Instructional Television (AIT Collection). Box A, Bloomington, Indiana, 47402

All series in the AIT Collection are available in more than one video format. In addition, some series are available for purchase on 16mm film. Most can be rented by instructional broadcast services for reception in classrooms. All may be recorded by schools to play back at their convenience. Programs are available for preview, purchase and rental. For information, contact publisher.

Association for Supervision and Curriculum Development (ASCD). Department 1184, 225 N. Washington Street, Alexandria, VA 22314

Each videotape may be rented for a five-day period. If you decide to buy the program, the rental fee will be credited to the purchase price. When ordering, please give a preferred and an alternate date for showing. The rental fee is \$50.00 for five days. A catalogue entitled, "Media for Staff Development" is available from the publisher. As well, check with Library Services.

Library Services. 11160 Jasper Avenue., 4th Floor West, Edmonton, Alberta, T5K 0L2

Library Services provides lending and dubbing services to the Department and to Alberta Schools without charge. Videotapes may be dubbed on 1/2-inch or 3/4-inch VHS-type cassette. Kits and 16mm films may be requested on a Materials Request Form or by telephone. These forms may be obtained by telephoning or by writing to the above address. Distribution of materials is restricted to Alberta Education personnel, including Regional Offices, superintendents, local school board office personnel and IMC directors, principals and teachers, ATA Specialist Council personnel, University Faculty of Education personnel, community colleges, other Advanced Education institutions offering teacher-aide programs, and all Early Childhood educators who come under the jurisdiction of Alberta Education.

University of Alberta. Instructional Technology Centre, Edmonton, Alberta. T6G 2E1

The University offers only dubbing services. A blank cassette may be sent or one may be provided by the University. There is a cost for this service. For more information contact Patricia D. Pasos, Departmental Secretary at the above address.

Marlin Motion Pictures Ltd. Suite 200, 211 Watline Avenue, Mississauga, Ontario, L4Z 1P3

Marlin Motion Pictures Ltd. Suite 1212, 666 St. James Street, Winnipeg, Manitoba R3G 3J6

Mondays, Marbles and Chalk is available for short-term rental or long-term lease. For more information contact Mavis Swiston at 890-1500.

National Resource and Dissemination Center, University of South Florida, Tampa, Florida 33620 (813) 974-2875

Distributor for National Education Association. Project on Utilization of Inservice Education R & D Outcomes.

References

TEACHER EFFECTIVENESS

- Abrami, P. C., Perry, R. P., and Leventhall, L. The relationship between student personality characteristics, teacher ratings and student achievement. Journal of Educational Psychology, 74(1), 1982.
- Abrami, P. C., et al. Do teacher standards for assigning grades affect student evaluations of instruction? Journal of Educational Psychology, 72(1), February 1980.
- Abrams, J. D. Precise teaching is more effective teaching. Educational Leadership, 39(2), November 1981.
- Academic learning time. The best of ERIC on educational management, Number 65. Eugene, Oreg.: ERIC Clearinghouse on Educational Management, 1982. ERIC. ED 213 072.
- Algozzine, B., Ysseldyke, J., and Christensen, S. The influence of teachers' tolerances for specific kinds of behaviors on their ratings of a third grade student. The Alberta Journal of Educational Research, 29(2), June 1983.
- Allen, E. K. A study of the relationship of teacher enthusiasm to salient, selected variables influencing achievement in the vocational laboratory. Final Report. Philadelphia: Temple University, 1979. ERIC. ED 179 781.
- Allington, R. L. Teacher interruption behaviours during primary-grade oral reading. Journal of Educational Psychology, 72(3): 371-77, June 1980.
- Amato, J. A. Social class discrimination in the schooling process: Myth and reality. Urban Review, 12(3): 121-30, Fall 1980.
- Anania, J. The influence of instructional conditions on student learning and achievement. In H. J. Walberg and T. N. Postlethwaite (Eds.), Evaluation in education: An international review series 7. Chicago, Ill: Pergamon Press, 1983.
- Anderson J. and Withrow, J. The impact of lecturer nonverbal expressiveness on improving mediated instruction. Communication Education, 30, Oct. 1981.

- Anderson, L. M. and Brophy, J. E. An experimental investigation of first grade reading group instruction. Report no. 76-3, 1976. Austin, Texas: Research and Development Center for Teacher Education.
- Anderson, L. M., Evertson, C. M., and Brophy, J. E. An experimental study of effective teaching in first-grade reading. The Elementary School Journal, 79(4), March 1979.
- Anderson, L. M., Evertson, C. M., and Emmer, E. T. Dimensions in classroom management derived from recent research. Journal of Curriculum Studies, 12(4), 1980.
- Anderson, L. W. Learning time and educational effectiveness. Reston, Va.: National Association of Secondary School Principals, 1980. ERIC. ED 210 780. Microfiche only.
- Andre, T. Does answering higher level questions while reading facilitate productive learning? Review of Educational Research, 49(2): 280-318, Spring 1979.
- Archambault Jr., F. X., et al. The classroom activities log: A personalized record of a child's school day as recorded by his/her teacher. Paper presented at the annual meeting of the National Council on Measurement in Education, San Francisco, 1979. ERIC. ED 178 609.
- Arlin, M. Teacher transitions can disrupt time flow in classrooms. American Educational Research Journal, 16(1): 42-56, Winter 1979.
- Aspy, D. and Roebuck, F. Kids don't learn from people they don't like. Amherst, Mass.: Human Resource Development Press, 1977.
- Baksh, I. J. and Martin, W. B. W. Teacher expectation and the student perspective. The Clearinghouse, 57(8), April 1984.
- Bardwell, R. Feedback: How does it function? Journal of Experimental Education, 50(1): 4-9, Fall 1981.
- Batson, A. D. Questioning: A reading/thinking foundation for the gifted. Paper presented at the annual meeting of the Southwest Regional Conference of the International Reading Association, San Antonio, 1981. ERIC. ED 201 999.
- Beatty, M. J. and Behnke, R. R. Teacher credibility as a function of verbal content and paralinguistic cues. Communication Quarterly, 28(1): 55-59, Winter, 1980.

- Becher, R. M. Teacher behaviors related to the mathematical achievement of young children. Journal of Educational Research, 73(6): 336-40, Jul-Aug. 1980.
- Bechtol, W. and Anderson, D. Preventative discipline: A review of the literature. Small School Forum, 3(2), Winter 1981.
- Becker, W. C. Symposium on direct instruction: The Follow Through data show that some programs work better than others. Paper presented at the annual meeting of the American Educational Research Association, Toronto, 1978. ERIC. ED 173 363.
- Becker, W. C., and Gersten, R. A follow-up of Follow Through: The later effects of the direct instruction model on children in fifth and sixth grades. American Educational Research Journal, 19(1): 75-92, Spring 1982.
- Bennett, N. Time to teach: Teaching-Learning processes in primary schools. East Lansing: Michigan State Univ. Institute for Research on Teaching, 1981. ERIC. ED 209 242.
- Berliner, D. (Ed.) Research on teaching implications for practice. Washington, D.C.: National Institute of Education, 1982.
- Bernstein, M. A. Teacher's lesson plans: The myth and the reality, 1981. ERIC. ED 202 813.
- Bettencourt, E. M. et al. Effects of training teachers in enthusiasm on student achievement and attitudes. Paper presented at the annual meeting of the American Educational Research Association, Boston, 1980. ERIC. ED 194 592.
- Block, J., and Burns, R. Mastery learning. In L. Sholman (Ed.), Review of research in education, Itasca, Ill.: F.E. Peacock, 1976.
- Bloom, B. S. A new direction in education research: Alterable variables. Phi Delta Kappan, February 1980.
- Bloom, B. S. New views of the learner: Implications for instruction and curriculum. Educational Leadership, 35, 1978.
- Bloom, B. S. Time and Learning. American Psychologist, September 1974.

- Bloom, R. B., and Bourdon, L. Types and frequencies of teachers' written instructional feedback. Journal of Educational Research, 74(1): 13-15, Sept-Oct. 1980.
- Blosser, P. What research says: Teaching science to middle school students. School Science and Mathematics, 83(8), December 1983.
- Boak, R., and Conklin, R. The effect of teachers' levels of interpersonal skills on junior high school students' achievement and anxiety. American Educational Research Journal, 12(4), 1975.
- Bognar, C. J. Teacher expectations and student characteristics. Canadian Journal of Education, 8(1), 1983.
- Bognar, C. J. Dissonant feedback about achievement and teachers' expectations. The Alberta Journal of Educational Research, 28(3): 277-287, September 1982.
- Borg, W. R. Teacher coverage of academic content and pupil achievement. Journal of Educational Psychology, 71(5): 635-45, October 1979.
- Borg, W. R. and Ascione, F. R. Classroom management in elementary mainstreaming classrooms. Journal of Educational Psychology, 74(1): 85-95, Feb. 1982.
- Bowermaster, J. Classroom management. Washington, D.C.: ERIC Clearinghouse, 1981. (ERIC Short Report #1).
- Bozwick, B. E. A study of teacher questioning and student response. Interaction during pre story and post story portions of reading comprehension lessons. Paper presented at the annual meeting of the American Educational Research Association, New York, 1982. ERIC. ED 215 294. Microfiche only.
- Brimner, L. D. The effects of praise and blame on writing. English Journal, 71(1): 58-60, Jan. 1982.
- Brookover, W. B., and Lezotte, L. W. Changes in school characteristics coincident with changes in student achievement. Occasional Paper No. 17. East Lansing: Michigan State Univ., Institute for Research on Teaching, 1979. ERIC. ED 181 005.
- Brophy, J. Teacher praise: A functional analysis. A Review of Educational Research, 51, Spring 1984.

- Brophy, J. Successful teaching strategies for the inner-city child. Phi Delta Kappan, April 1982.
- Brophy, J. On praising effectively. Elementary School Journal, 81(5): 269-78, May 1981.
- Brophy, J. Teacher praise. A functional analysis. Review of Educational Research, 51(1): 5-32, Spring 1981.
- Brophy, J. E. Teachers' cognitive activities and overt behaviors. East Lansing: Michigan State Univ. Institute for Research on Teaching, 1980. ERIC. ED 200 561.
- Brophy, J. Advances in teacher effectiveness research. East Lansing, MI.: Michigan State University Institute for Research on Teaching, 1979.
- Brophy, J. E. Advances in teacher research. The Journal of Classroom Instruction, Winter 1979.
- Brophy, J. and Evertson, C. Learning from teaching: A developmental perspective. Boston: Allyn and Bacon, Inc, 1976.
- Brophy, J. E., and Good, T. L. Teacher behavior and student achievement. In M. Wittrock (Ed.), Handbook of research on teaching (3rd. ed.). New York: Macmillan 1985 (?).
- Brophy, J. E. and Putnam, J. G. Classroom management in the elementary grades. Research Series No. 32. East Lansing: Michigan State Univ. Institute for Research on Teaching, 1978. ERIC. ED 167 537.
- Canadian Teachers' Federation. Teacher effectiveness research. Part I: General works. Bibliographies in Education No. 77. Ottawa, Ontario: Canadian Teachers' Federation, 1984.
- Canadian Teachers' Federation. Teacher effectiveness research. Part II: Special topics. Bibliographies in Education, No. 78. Ottawa, Ontario: Canadian Teachers' Federation, 1984.
- Carnie, D. Direct instruction: A successful system for educationally high risk children. Journal of Curriculum Studies, 11(1): 29-45, Jan-Mar. 1979.

Caruso, V. M. Teacher enthusiasm behaviors reported by teachers and students. Paper presented at the annual meeting of the American Educational Research Association, New York, 1982. ERIC. ED 217 038.

CEDR. Center on Evaluation, Development, and Research. Effective classroom management. (Hot Topic Series). Bloomington, IN: CEDR, Phi Delta Kappa, 1982-83.

Centra, J. A. and Potter, D. A. School and teacher effects: An interrelated model. Review of Educational Research, 50(2), Summer 1980.

Cherry, L. J., and Berman, L. S. Teacher-student interaction and teachers' perceptions of students' communicative competence: A cross-sectional study. Technical Report No. 473. Madison: Wisconsin Univ. Research and Development Center for Individualized Schooling, 1978. ERIC. ED 166 670.

Cicchelli, T. Forms and functions of instruction patterns: Direct and nondirect. Instructional Science, 12(4), December 1983.

Cicchelli, T. Implementing the direct instruction pattern: A study with primary grade low SES children. Urban Education, 17(4): 419-30, Jan. 1983.

Clark, C. M. and Yinger, B. Research on teacher planning: A progress report. Journal of Curriculum Studies, 11(2): 175-77, Apr-June 1979.

Clark, C. M., and Yinger R. J. The hidden world of teaching: Implications of research on teacher planning. Research series No. 77. Paper presented at the annual meeting of the American Educational Research Association, Boston, 1980. ERIC. ED 191 844.

Clifford, M. M. The effects of quantitative feedback on children's expectations of success. British Journal of Educational Psychology, 48: 220-6, June 1978.

Clifton, R. A. The effects of students' ethnicity and sex on the expectations of teachers. Interchange on Educational Policy, 12(1): 31-38, 1981.

Clifton, R. A. Ethnicity, teachers' expectations and the academic achievement process in Canada. Sociology of Education, 54(4): 291-301, Oct. 1981.

Cogan, M. L. The behavior of teachers and the productive behavior of their pupils. Journal of Exceptional Children, 1958.

- Coker, H., Medley, D., and Soar, R. How valid are expert opinions about effective teaching? Phi Delta Kappan, October 1980.
- Comparison and identification. Time leader's guide. Basic skills instructional improvement program. Philadelphia, Pa.: Research for Better Schools, Inc., 1980. ERIC. ED 193 201.
- Cookson, C. The effects of content and structure in teacher behavior and student engaged time. Paper presented at the annual meeting of the American Educational Research Association, Boston, 1980.
- Cooper, H., et al. Relations between student achievement and various indexes of teacher expectations. Journal of Educational Psychology, 74(4): 577-79, Aug. 1982.
- Cooper, H. M., et al. Teachers' beliefs about interaction control and their observed behavioral correlates. Journal of Educational Psychology, 72(3): 345-54, June 1980.
- Cornbleth, C. and Korth, W. Context factors and individual differences in pupil involvement in learning activity. Journal of Educational Research, 73(6): 318-23, Jul-Aug. 1980.
- Costa, A. Recent research on the analysis of instruction. Phi Delta Kappan, May-June 1977.
- Cotton, K. and Savard, W. G. Time factors in learning. Research on school effectiveness project: Topic summary report. Portland, Oreg.: Northwest Regional Educational Lab., 1981. ERIC. ED 214 706.
- Crano, W. D., and Mellon, P. M. Causal influence of teachers' expectations on children's academic performance: A Cross-Lagged panel analysis. Journal of Educational Psychology, 70(1): 39-49, Feb. 1978.
- Crowell, D. C., and Hu-pei Au, K. A scale of questions to guide comprehension instruction. Reading Teacher, 34(4): 389-93, Jan. 1981.
- Cruickshank, D. R. Applying research on teacher clarity. Journal of Teacher Education, XXXVI(2): 44-47, March-April 1985.
- Cruickshank, D. R., et al. Clear teaching: What is it? British Journal of Teacher Education, 5(1), January 1979.

- Curwin, R. Are your statements addicted to praise? Instructor, 90(3): 61-62, Oct. 1980.
- Curwin, R. L. and Mendler, A. N. High standards for effective discipline. Educational Leadership, 41(8), May 1984.
- Daines, D. Teachers' oral questions and subsequent verbal behaviors of teachers and students, 1982. ERIC. ED 225 979.
- Defino, E., and Carter H. (Eds.). Changing teacher practices: Proceedings of a national conference (Austin, Texas, October, 1981). Austin: Texas Univ. Research and Development Center for Teacher Education, February 1982. ERIC. ED 223 582.
- Denham, C. H. and Michael, J. J. Teacher sense of efficacy: A definition of the construct and a model for further research. ERO, 6(1), Spring 1981.
- Dillon, J. T. Cognitive correspondence between question/statement and response. American Educational Research Journal, 19(4): 540-51, Winter 1982.
- Dillon, J. T. To question and not to question during discussions. I. Questioning and discussion. Journal of Teacher Education, 32(5): 51-55, Sept-Oct. 1981.
- Dillon, J. T. To question and not to question during discussion. II. Non-questioning techniques. Journal of Teacher Education, 32(6): 15-20, Nov-Dec. 1981.
- Donlan, D. and Singer, H. Active comprehension of short stories. Paper presented at the annual meeting of the Claremont Reading Conference. Claremont, Ca., 1979. ERIC. ED 170 705.
- Doyle, W. Making managerial decisions in classrooms. In D. L. Duke (Ed.), Classroom management. Chicago: National Society for the Study of Education, University of Chicago Press, 1979.
- Duffy, G. G., et al. Two styles of direct instruction in teaching second-grade reading and language arts: A descriptive study. East Lansing, Michigan State Univ. Institute for Research on Teaching, 1981. ERIC. ED 212 996.
- Duke, D. L. (Ed.). Helping teachers manage classrooms. Alexandria, Virginia: Association for Supervision and Curriculum Development, 1982.

- Dykman, B. and Reis, T. Personality correlates of classroom seating position. Journal of Educational Psychology, 71(3): 346-54, June 1979.
- Easton, J. Q., et al. Relationship among student time on task, orientation of teachers, and instructional grouping in elementary reading classes. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979. ERIC. ED 169 503.
- Eder, D. The impact of management and turn-allocation activities on student performance. Discourse Processes, 5(2): 147-59, Apr. - June 1982.
- Edwards, C. H. and Surma, M. The relationship between type of teacher reinforcement and student inquiry behavior in science. Journal of Research in Science Teaching, 17(4): 337-41, July 1980.
- Elijah, D. Teacher expectations: Determinants of pupils' reading achievement. Reading Improvement, 17(2): 117-21, Summer 1980.
- Emmer, E. T. Effective management in junior high mathematics classrooms. Austin: Texas Univ. Research and Development Center for Teacher Education, 1981. ERIC. ED 206 448.
- Emmer, E. T., et al. The first weeks of class. . . And the rest of the year. Research and Development Report No. 6005. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979. ERIC. ED 175 861.
- Enseki, R. and Hancock, R. K. Identification of teaching orientations. Teaching Sociology, 7(1), October 1979.
- Entwistle, D. R., and Hayduk, L. A. Academic expectations and the school attainment of young children. Report No. 269. Baltimore, Md.: John Hopkins Univ. Center for Social Organization of Schools, 1978. ERIC. ED 174 359.
- ERIC Document Improving teacher effectiveness. The best of ERIC on educational management (70). National Institute of Education, Washington, D.C., 1983. ERIC. ED 233 431.
- Evertson, C. M. Differences in instructional activities in high and low achieving junior high classes. Research and Development. Report Number 6106. Austin: Texas Univ. Research and Development Center for Teacher Education, 1980. ERIC. ED 195 546.

- Evertson, C. M., et al. Relationships between classroom behaviors and student outcomes in junior high mathematics and English classes. American Educational Research Journal, 17(1): 43-60, Spring 1980.
- Finkelstein, J. M. and Ritter, V. F. Does anyone have any questions? 1980. ERIC. ED 188 768.
- Fisher, C. W., et al. Teaching behaviours, academic learning time, and student achievement: An overview. Journal of Classroom Interaction, 17(1): 2-15, Winter 1981.
- Fisher C. W., et al. Teaching behaviors, academic learning time and student achievement: Final Report of Phase III-B, Beginning Teachers Evaluation Study. Technical Report V-1. San Francisco, Calif.: Far West Lab for Educational Research and Development, 1978. ERIC. ED 183 525.
- Fisher, C. W., et al. Teaching and learning in the elementary school: A summary of the beginning teacher evaluation study. Report VII-I. Beginning Teacher Evaluation Study Technical Report Series. San Francisco: Far West Lab for Educational Research and Development, 1978. ERIC.
- Flanders, N. A. Analyzing teacher behavior. Reading, Mass.: Addison - Wesley, 1970.
- Flanders, N. Teacher influences, pupil attitudes and achievement. Washington, D.C. U.S. Government Printing Office, 1965.
- Fox, R., Luszki, M. B., and Schmuck, R. Diagnosing classroom learning environments. Chicago: Science Research Associates, Inc., 1966.
- Frederick, W., et al. Procedures and use of time in reading classes in high-gain and low-gain elementary schools in Chicago. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979. ERIC. ED 176 237.
- Frieberg, H. J. Applying research to the classroom. Journal of Classroom Interaction, 16 (1).
- Fry, P. S. Process measures of problem and non-problem children's classroom behavior: The influence of teacher behavior variables. British Journal of Educational Psychology, 53(1): 79-88, Feb. 1983.

- Gabrys, R. E. An analysis of the influence of a training intervention for business-like behavior on the business-like behavior and level of warmth of preservice elementary teachers. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979. ERIC. ED 171 681.
- Galluzzo, G. R. Changing teacher performance with protocols. Paper presented at annual meeting of the American Educational Research Association, New York, 1982. ERIC. ED 215 973.
- Gambrell, L. B. Think-Time: Implications for reading instruction. Reading Teacher, 34(2): 143-46, Nov. 1980.
- Gersten, R. and Carine, D. Direct instruction mathematics: A longitudinal evaluation of low-income elementary school students. The Elementary School Journal, 84(4), 1984.
- Gettinger, M. and White, M. A. Which is the stronger correlate of school learning? Time to learn or measured intelligence? Journal of Educational Psychology, 71(4): 405-12, Aug. 1979.
- Gillett, M. and Gall, M. The effects of teacher enthusiasm on the at-task behavior of students in elementary grades, 1980. ERIC. ED 202 823.
- Gold, S. What's wrong with telling? Clearinghouse, 57(7), March 1984.
- Goldstein, J. M., and Weber, W. A. Teacher managerial behaviors and student on-task behavior. Paper presented at the annual meeting of the Southwest Educational Research Association, Houston, 1979. ERIC. ED 178 484.
- Good, T. L. Listening to students talk about classrooms. Paper presented at annual meeting of American Educational Research Association, Los Angeles, 1981.
- Good, T. L. Teacher effectiveness in the elementary school. Journal of Teacher Education, 30(2): 52-64, Mar-April 1979.
- Good, T. L., Biddle, B. and Dunkin, M. Teachers make a difference. N.Y.: Holt, Rinehart and Winston, 1975.
- Good, T. L. and Brophy, J. E. Looking in classrooms (3rd Ed.). New York: Harper & Row Publishers, 1984.

- Good, T. L. and Grouws, D. The Missouri mathematics effectiveness project. An experimental study in fourth-grade classrooms. Journal of Educational Psychology, 7(3), 1979.
- Good, T. L. and Grouws, D. Teaching effects: A process-product study in fourth grade mathematics classrooms. Journal of Teacher Education, 28, May-June 1977.
- Good, T. L., et al. Teaching mathematics in high and low SES classrooms: An empirical comparison. Journal of Teacher Education, 29(5):85-90, Sept-Oct. 1978.
- Goodall, R. and Brown, L. The development of an instrument to assess classroom climate. The Journal of Classroom Interaction, 19(1), Winter 1983.
- Gooding, C. T. and Swift, J. N. Modifying teacher questioning behavior in classroom instruction. Paper presented at the annual meeting of the Eastern Educational Research Association, West Palm Beach, 1982. ERIC. ED 214 769.
- Goody, J. R. and Kelly, L. E. Down safe corridors: Eliminating school disruption. NASSP Bulletin, May 1984.
- Grapko, M. F. The relation of teacher expectancy and pupil self-assessment to pupil performance. Ontario Ministry of Education, 1980.
- Graves, D. H. and Giacobbe, M. E. Research update: Questions for teachers who wonder if their writers change. Language Arts, 49(5): 495-503, May 1982.
- Guida, Frank, and others. Academic anxiety, time-on-task and achievement: A structural model. Paper presented at the annual meeting of the American Educational Research Association, Montreal 1983. ERIC. ED 228 290.
- Gurin, P. and Morrison, B. M. Two-way socialization processes in the classroom. Final Report. Ann Arbor: Michigan Univ. Institute for Social Research, 1980. ERIC. ED 198 194.
- Guskey, T. R. The effects of change in instructional effectiveness on the relationship of teacher expectations and student achievement. Journal of Educational Research, 75(6): 345-49, July-Aug. 1982.
- Hannafin, M. J. The effects of systematized feedback on learning in natural classroom settings. Educational Research Quarterly, 7(3): 22-29, Fall 1982.

- Harnischfeger, A. Curricular control and learning time: District policy, teacher strategy, and pupil choice. Paper presented at the annual conference of the Indiana School Board Association, October 1979.
- Harrison, M. Class achievement and the background and behavior of teachers. Elementary School Journal, 77(1), September 1976.
- Harvey, K. D. Classroom management: An annotated bibliography, 1980. ERIC. ED 198 075.
- Helm, D. J. To discipline or not to discipline. Clearinghouse, 57(7), March 1984.
- Hiatt, D. B. and Keesling, J. W. The Dependability of classroom observations. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979. ERIC. ED 175 929. Microfiche only.
- Hines, C. V., et al. Measures of teacher clarity and their relationships to student achievement and satisfaction. Paper presented at the annual meeting of the American Educational Research Association, New York, 1982. ERIC. ED 222 531.
- Hodges, D. L. How to improve your students' learning through practice exercises and feedback, 1980. ERIC. ED 220 150.
- Hoffman, J. V. Feedback to oral reading miscues. Parts I & II. Final Report, 1981. ERIC. ED 227 455.
- Hoffman, J. V. Feedback to oral reading miscues. Part III. Final Report, 1982. ERIC. ED 227 456.
- Holliday, W. G. Overprompting science students using adjunct study questions. Journal of Research in Science Teaching, 20(3): 195-201, March 1983.
- Holmes, M. What are you doing with your time? Orbit, 10(5): 10-11, December 1979.
- Honea, Jr. J. Wait-Time as an instructional variable: An influence on teacher and student. Clearing House, 56(4): 167-70, Dec. 1982.
- Hughes, J. R. How do you behave? Your nonverbal actions are critical to student motivation. Music Educators Journal, 67(5): 52-53, Jan. 1981.

Huitt, W. and Segars, J. Characteristics of effective classrooms. Philadelphia: Research for better schools. October, 1980. ERIC. ED 207 216.

Huitt, W. G., et al. Monitoring and evaluating the critical dimensions of effective classrooms. Philadelphia, PA: Research for better schools, Inc, 1982. Paper presented at the annual meeting of the American Educational Research Association, 1982. ERIC. ED 221 597.

Hutslar, S. The expectancy phenomenon. Journal of Physical Education and Recreation, 52(7): 88-89, Sept. 1981.

Jacobson, K. The relationship of individual student time allocation to reading and mathematics achievement. Report from the project on Studies of Administration and Organization for Instruction. Madison: Wisconsin Univ. Research and Development Center for Individualized Schooling, 1980. ERIC. ED 196 906.

Jesse, K. School reviews: Pursuing effectiveness. The Canadian School Executive, March 1984.

Jeter, J. Teacher expectations and teacher classroom behavior. Educational Leadership, April 1973.

Jeter, J. T. and Davis, Jr. O. L. Differential classroom interaction in social studies as a function of differential expectations of pupil achievement. Journal of Social Studies Research, 6(1): 1-7, Winter 1982.

Jones, V. F. and Jones L. Comprehensive classroom management. Newton, Mass.: Allyn and Bacon (forthcoming).

Karweit, N. L. Time-on-Task: A research review. Report No. 332. Baltimore: Center for Social Organization of Schools, Johns Hopkins University, Jan. 1983.

Kennedy, J. J., et al. Additional investigations into the nature of teacher clarity. Journal of Educational Research, 72(1): 3-10, Sept-Oct. 1978.

Koerin, B. Teaching effectiveness and faculty development programs: A review. The Journal of General Education, 32(1), Spring 1980.

Kounin, J. Discipline and group management in classrooms. N.Y.: Holt, Rinehart, and Winston, 1970.

- Kounin, J. S. Observing and delineating techniques of managing behavior in classrooms. Journal of Research and Development in Education, 4(1), Fall 1970.
- Kuceris, M. Time on the right task can boost student success. Executive Educator, 4(8): 17-19, 26, Aug. 1982.
- Kuceris, M. and Zakariya, S. (Eds.). Time on task: Using instructional time more effectively. Arlington, Va.: American Association of School Administrators, 1982. ERIC. ED 221 924.
- Land, M. L. and Denham, A. Effect of teacher clarity on student achievement. Paper presented at the annual meeting of the Southwest Educational Research Association, Houston, 1979. ERIC. ED 177 127.
- Land, M. L. and Smith, L. R. Low inference teacher clarity variables: Effects on student achievement. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979. ERIC. ED 179 499.
- Larkins, A. G. and McKinney, C. W. Two studies of the effects of teacher enthusiasm on social studies achievement of seventh grade students. Theory and Research in Social Education, 10(1): 27-41, Spring 1982.
- Lembo, J. The psychology of effective classroom instruction. Columbus, Ohio: Charles E. Merrill, 1969.
- Levin, B. Managing an effective classroom. The Canadian School Executive, March 1984.
- Levin, T. Instruction which enables students to develop higher mental processes. Evaluation in Education, 3, 1979.
- Levin, T. and Long, R. Effective instruction. Alexandria, Va.: Association for Supervision and Curriculum Development, 1981. ERIC. ED 200 572. Microfiche.
- Lockavitch, Jr. J. F. Seating arrangement and classroom behavior: A simple but sometimes overlooked method for classroom control, 1979. ERIC. ED 179 014.
- Lond, M. L. Combined effect of two teacher clarity variables on student achievement. Journal of Experimental Education, 50(1), Fall 1981.

- Low, L. and Wolfle, L. M. Effects of a first grade teacher on students' achievement in four subsequent years. Elementary School Journal, 83(5): 528-36, May 1983.
- MacKay, D. A. Project Quest: Teaching strategies and pupil achievement. Edmonton: Centre for Research in Teaching, University of Alberta, 1979.
- Mahlis, M. and D'Angelo, K. Teacher questions: An experimental analysis of the question effect hypothesis. Paper presented at the annual meeting of the Association of Teacher Educators, Orlando, 1983. ERIC. ED 227 062.
- Martinek, T. J. Pygmalion in the gym: A model for the communication of teacher expectations in physical education. Research Quarterly, 52(1): 58-67, Mar. 1981.
- Martin, W. R. Teacher behaviors - Do they make a difference? A review of the research. Phi Kappa Delta Record, December 1979.
- McCaleb, J. L. and Rosenthal B. G. Relationships in teacher clarity between students' perceptions and observers' ratings. Journal of Classroom Interaction, 19(1), Winter 1983.
- McCaleb, J. L. and White, J. A. Critical dimensions in evaluating teacher clarity. Journal of Classroom Interaction, 15(2): 27-30, Summer 1980.
- McFaul, S. A. An examination of direct instruction. Educational Leadership, 40(7): 67-69, Apr. 1983.
- McKenzie, G. R. and Henry, M. Effects of testlike events on on-task behavior, test anxiety, and achievement in a classroom rule-learning task. Journal of Educational Psychology, 71(3): 370-74, June 1979.
- McKinney, C. W. and Larkins, A. G. Effects of high, normal and low teacher enthusiasm on secondary social studies achievement. Social Education, 46(4): 290-92, Apr. 1982.
- McLaughlin, T. F., et al. A timer game: Effects for on-task behavior and generalization for academic behavior for an entire special education class. Contemporary Educational Psychology, 4(2): 172-74, Apr. 1979.
- Medley, D. M. The effectiveness of teachers. In P. L. Peterson and H. J. Walberg (Eds.), Research on teaching. Berkeley, CA.: McCutchan, 1979.

- Medley, D. M. Teacher competence and teacher effectiveness. American Association of Colleges for Teacher Education, Washington, D. C., 1977.
- Meyer, L. A. Long-term academic effects of the direct instruction project Follow Through. The Elementary School Journal, 84(4), 1984.
- Miller, R. and Bositis D. Alternative teaching techniques. Teaching Political Science, 6(3), April 1979.
- Minner, S. Expectations of vocational teachers for handicapped students. Exceptional Children, 48(5): 451-53, Feb. 1982.
- Mintz, L. and Yarger, S. J. Conceptual level and teachers' written plans. Paper presented at the annual meeting of the American Educational Research Association, Boston, 1980. ERIC. ED 189 030.
- Morine-Dershimer, G. A study of teacher planning. Special Study C. Beginning Teacher Evaluation study. Technical report series. San Francisco: Far West Lab. for Educational Research and Development, 1976. ERIC. ED 146 160.
- Mukhopadhyay, S., and Chugh, A. Developing a strategy for minimizing under-achievement through teacher classroom behavior. 1979. ERIC. ED 207 725. Microfiche only.
- Munroe, M. J. Effective teacher behaviors as an avenue to enhance the self-esteem of teachers. Paper presented at an inservice held at Cholla High School, Tucson, 1982. ERIC. ED 228 162.
- National Education Association. Project on utilization of inservice education R & D outcomes. Effective questioning: Elementary level (Minicourse 1). Description of teacher inservice education materials, 1976. ERIC. ED 167 531.
- National Education Association. Project on utilization of inservice education R & D outcomes. Effective questioning techniques (Implementative Module 3). Description of teacher inservice education materials, 1977. ERIC. ED 166 189.
- National Education Association. Project on utilization of inservice education R & D outcomes. Higher cognitive questioning (Minicourse 9). Description of teacher inservice education materials, 1976. ERIC. ED 167 530.

National Education Association. Project on utilization of inservice education R & D outcomes. Protocol modules on classroom management (overview). Description of teacher inservice education materials, 1977. ERIC. ED 167 546.

National Education Association. Project on utilization of inservice education R & D outcomes. Questioning skills (Cluster V; 5 Modules -- a summary). Description of teacher inservice education materials, March 1977. ERIC. ED 169 064.

National Education Association. Project on utilization of inservice education R & D outcomes. Questioning that turns students on rather than off. Description of teacher inservice education materials, February 1977. ERIC. ED 171 685.

National Education Association. Project on utilization of inservice education R & D outcomes. The use of higher level questions (Module 2). Description of teacher inservice education materials, 1977. ERIC. ED 169 002.

National Education Association. Project on utilization of inservice education R & D outcomes. The use of questioning in social studies. Description of teacher inservice education materials, 1977. ERIC. ED 169 063.

National School Boards Association. Student discipline: Practical approaches, 1979. ERIC. ED. 177 691. Microfiche only.

Noonan, R. and Wold H. The Bloom model of human characteristics and school learning. Evaluation of Education, 7, 1983.

Oien, F. M. Teacher directed behavior toward individual students, 1979. ERIC. ED. 175 826.

Ornstein, A. Do teachers make a difference? Childhood Education, May-June 1983.

Ornstein, A. and Levine, D. Teacher behavior research: Overview and outlook. Phi Delta Kappan, 62, April 1981.

Orpen, C. Student versus lecturer assessment of learning: A research note. Higher Education, II, 1982.

Pandya, H. S. Teacher expectancy related to student performance in vocational education. University Park, Pa.: Pennsylvania State Univ. Department of Agriculture Education, 1978. ERIC. ED 160 890. Microfiche only.

- Parsons, J. E., et al. The effects of teachers' expectancies and attributions on students' expectancies for success in mathematics. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979. ERIC. ED 180 787.
- Peterson, P. L. Direct instruction: Effective for what and for whom? Educational Leadership, 40(7): 67-69, Apr. 1983.
- Peterson, P. Direct instruction reconsidered. In Author and H. J. Walberg (Eds.), Research on teaching: Concepts, findings and implications. Berkeley, CA.: McCutchan, 1979.
- Piechowski, M. M. and Colangelo, N. Developmental potential of the gifted. Gifted Child Quarterly, 28(2), Spring 1984.
- Pittman, S. I. A cognitive ethnography and quantification of a first grade teacher's selections of strategies to manage students. Paper presented at the annual meeting of the Southwest Educational Research Association, Houston, Texas, 1983. ERIC. ED 225 967.
- Placek, J., et al. Academic learning time (ALT-PE) in a traditional elementary physical education setting: A descriptive analysis. Journal of Classroom Interaction, 17(2): 41-47, Summer 1982.
- Probst, D. A study of time on-task in three teachers' classrooms using different instructional modes. Report from the project on Studies of Instructional Programming for the Individual Student. Madison: Wisconsin Univ. Research and Development Center for Individualized Schooling, 1980. ERIC. ED 196 905.
- Proctor, C. P. Teacher expectations: A model for school improvement. The Elementary School Journal, March 1984.
- Project, T.E.A.C.H. Teacher effectiveness and classroom handling. Performance Learning Systems. 446 Old Hook Road, Suites 25-26, Emerson, New Jersey, 07630, 1974. (A training course under the auspices of the Alberta Teachers' Association).
- Raphael, D., Wahlstrom, M., and McLean, L. Are boys better at math than girls? Orbit 70, 15(2), April 1984.
- Ratsoy, E. W. Accounting for differences in teacher effectiveness criteria. The Canadian Administrator, 10(8), May 1971.

- Ratsoy, E. W. Characteristics and instructional practices of Alberta teachers in 1968-1969. Edmonton: Alberta Advisory Committee on Educational Studies, 1970.
- Reaves, C. A., and Shine, S. C. A study of the effects of prefatory remarks on teacher evaluation, 1977. ERIC. ED. 175 811.
- Redfield, D. L., and Rousseau, E. W. A meta-analysis of experimental research on teacher questioning behavior. Review of Educational Research, 51(2): 237-45, Summer 1981.
- Richey, L. S., et al. Teachers' attitudes and expectancies for siblings of learning disabled children. Minneapolis: Minnesota Univ. Institute for Research on Learning Disabilities, 1980. ERIC. ED 203 613.
- Riley, H. J. P. A comparison of three methods of improving preservice science teachers' questioning knowledge and attitudes toward questioning. Journal of Research in Science Teaching, 17(5): 419-24, Sept. 1980.
- Roehler, L. R. and Duffy, G. G. Matching direct instruction to reading outcomes. Language Arts, 49(5): 476-80, May 1982.
- Roscoe, B. and Peterson, K. Teacher and situational characteristics which enhance learning and development. College Student Journal, 16(4), Winter 1982.
- Rosenshine, B. Classroom instruction. In N. Gage (Ed.), The psychology of teaching methods Part II. Chicago: National Society for the Study of Education, University of Chicago Press, 1976.
- Rosenshine, B. Enthusiastic teaching: A research review. School Review, 78(4), August 1970.
- Rosenshine, B. V. Content, time and direct instruction. In P. L. Peterson and H. J. Walberg (Eds.), Research in teaching: Concepts, findings and implications. Berkeley, CA.: McCutchan, 1979.
- Rosenthal, R. The pygmalion effect lives. Psychology Today, September 1973.
- Rosenthal, R. and Jacobson, L. Pygmalion in the classroom. New York: Holt, Rinehart and Winston, 1968.

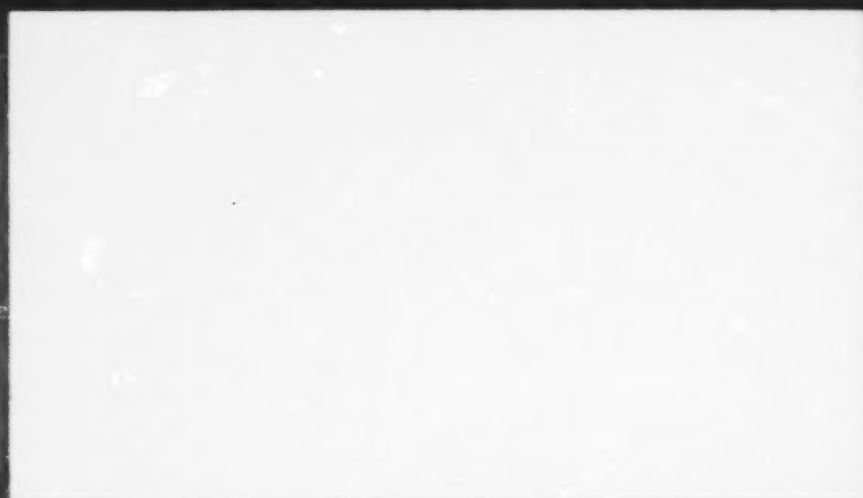
- Rosner, F. C. The future of teaching as a profession: Assessing classroom management skills. Paper presented at the annual meeting of the American Association of Colleges for Teacher Education, Detroit, 1983. ERIC. ED 228 165.
- Ross, R. P. What's happening in elementary school classrooms? A review of selected literature, 1982. ERIC. ED 222 248.
- Rounds, T. S., et al. An analysis of teachers' rule systems at a successful school. Verification inquiry, Volume IV. Ecological perspectives for successful schooling practice. San Francisco: Far West Lab. for Educational Research and Development, 1981. ERIC. ED 230 498.
- Rucker, G. H. The teacher questioning measure, 1980. ERIC. ED 190 525.
- Russell, T. L. Developing self-monitoring skills in pre-service science teacher education. Paper presented at the annual meeting of the Canadian Society for the Study of Education, Montreal, 1980.
- Ryan, D. W. and Butler, L. F. Effectiveness of teaching: The Canadian experience. Studies in Educational Evaluation, 7, 1982.
- St. George, A. Teacher expectations and perceptions of Polynesian and Pakeha pupils and the relationship to classroom behavior and school achievement. British Journal of Educational Psychology, 53(1): 48-59, Feb. 1983.
- Salzberg, R.S. and Salzberg, C. L. Praise and corrective feedback in the remediation of incorrect left-hand positions of elementary string players. Journal of Research in Music Education, 29(2): 125-33, Summer 1981.
- Sanford, J. P. and Evertson, C. M. Time use and activities in junior high classes. Journal of Educational Research, 76(3): 140-47, Jan-Feb. 1983.
- Saxon, J. Incremental development: A breakthrough in mathematics. Phi Delta Kappan, 63(7): 482-84, Mar. 1982.
- Seifert, E. H. and Beck Jr., J. J. Time/Learning relationships in secondary schools: A research report, 1983. ERIC. ED 229 853.
- Slavin, R., Leavey, M., and Madden, N. Combining cooperative learning and individualized instruction: Effects on student mathematics achievement, attitudes, and behaviors. The Elementary School Journal, 84(4), 1984.

- Slavin, R. E. and Karweit, N. L. Cognitive and affective outcomes of an intensive student team learning experience. Journal of Experimental Education, 50(1), Fall 1981.
- Sloan, L. and Toews, R. Good questioning techniques. The Canadian School Executive, March 1984.
- Smith, B. D. Responding effectively to incorrect answers. Social Studies, 72(2): 56-60, Mar-Apr. 1981.
- Smith, H. A. Nonverbal behavior and student achievement in the elementary classroom. Paper presented at the meeting of the Canadian Society for the Study of Education, Saskatoon, 1979. ERIC. ED 181 000.
- Smith, L. R. Teacher clarifying behaviors: Effects on student achievement and perceptions. Journal of Experimental Education, 55(3): 162-169, 1985.
- Smith, L. R. Task-Oriented lessons and student achievement. Journal of Educational Research, 73(1): 16-19, Sept. - Oct. 1979.
- Smith, L. R. and Bramblett, G. H. The effect of teacher vagueness terms on student performance in high school biology. Journal of Research in Science Teaching, 18(4): 353-60, July 1981.
- Smith, L.R. and Cotten, M. L. Effect of lesson vagueness and discontinuity on student achievement and attitudes. Journal of Educational Psychology, 72(5): - 670-75, Oct. 1980.
- Smith, L. R. and Land, M. L. Low-inference verbal behaviors related to teacher clarity. Journal of Classroom Interaction, 17(1):37-42, Winter 1981.
- Smith, L. R. and Land, M. L. Student perception of teacher clarity in mathematics. Journal of Research in Mathematics, 11:137-146, 1980.
- Smith, L. R., Smith, D. D., and Staples, P. R. Effect of teacher transitions and superfluous content on student achievement and on perception of lesson effectiveness in high school English. Journal of Educational Research, 75(3), February 1982.
- Smith, L. R., et al. Effect of teacher transitions and superfluous content on student achievement and on perception of lesson effectiveness in high school English. Journal of Educational Research, 75(3): 173-77, Jan. - Feb. 1982.

- Soar, R. Final report: Follow Through classroom process measurement and pupil growth. Gainesville, Florida: College of Education, U. of Florida, 1973.
- Soar, R. S. Measures of quality in the classroom. Journal of Classroom Interaction, 18(2), Summer 1983.
- Stallings, J. and Kaskowitz, D. A study of Follow Through implementation. Paper presented to the annual meeting of the A.E.R.A., April 1975.
- Stennett, R. G. DISTAR reading program in junior opportunity classes: Phase III-- Impact of two full years of instruction. Special Education in Canada, 53(2): 7-10, Winter 1979.
- Stennett, R. G. and Earl, L. M. Elementary French program evaluation: The effect of successive increases in instructional time. Research Report 82-01. London, Ont.: London Board of Education, Educational Research Services, 1982. ERIC. ED 221 042.
- Stern, P. R. and Shavelson, R. J. The relationship between teachers' grouping decisions and instructional behaviors: An ethnographic study of reading instruction. Paper presented at the annual meeting of the American Educational Research Association, Los Angeles, 1981. ERIC. ED 201 971.
- Stillman, P. L., Gillers, M. A., Heins, M., Nicholson, G., and Sabers, D. L. Effect of immediate student evaluations on multi-instructor course. Journal of Medical Education, 58(3), March 1983.
- Stringer, B. R., and Hurt, H. T. To praise or not to praise: Factors to consider before utilizing praise as a reinforcing device in the classroom communication process. Paper presented at the annual meeting of the Southern Speech Communication Association, Austin, 1981. ERIC. ED 202 054.
- Strother, D. Another look at time-on-task. Phi Delta Kappan, June 1984.
- Strother, D. B. Practical applications of research. Phi Delta Kappan, 66(10), June 1985.
- Stumpf, S. A. and Freedman, R. D. Expected grade covariation with student ratings of instruction: Individual versus class effects. The Journal of Educational Psychology, 71(3), June 1979.

- Styles, K. and Cavanagh, G. The discipline dilemma. Education Canada, 22(2), Summer 1982.
- Swann, Jr. W. B., and Snyder, M. On translating beliefs into action: Theories of ability and their application in an instructional setting. Journal of Personality and Social Psychology, 38(6): 879-88, June 1980.
- Swift, J. N. Wait time and questioning skills of middle school science teachers. Final Technical Report. New York: New York State Univ. System, 1982. ERIC. ED 220 276.
- Talmage, H. and Rasher, S. P. A study of the effects of three dimensions of instructional time on academic achievement. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, April 1979.
- Taylor, J. L. Teacher characteristics and classroom behavior. Journal of classroom Instruction, 16(1).
- Tobin, K. G. and Capie, W. The relationships of selected dimensions of teacher performance with student engagement. Paper presented at the annual meeting of the Mid South Educational Research Association, New Orleans, 1980. ERIC. ED 194 521.
- Tobin, K. G. and Capie, W. Student engagement in middle school science classrooms. Paper presented at the annual meeting of the Southeastern Association for the Education of Teachers of Science, Orlando, FL, 1980. ERIC. ED 194 522.
- Tobin, K. G. The effect of an extended teacher wait-time on science achievement. Journal of Research in Science Teaching, 17(5): 469-75, Sept. 1980.
- Vartuli, S. and Phelps, C. Classroom transitions. Childhood Education, 57(2): 94-96, Nov. - Dec. 1980.
- Veldman, D. and Brophy, J. Measuring teacher effects on pupil achievement. Journal of Educational Psychology, 66(3), June 1974.
- Veldman, D. and Brophy, J. Do teachers make a difference? A report of recent research on pupil achievement. U. S. Department of Health, Education and Welfare, Office of Education: U. S. Government Printing Office.

- Weber, W. A., et al. A mini-instructional system for increasing teacher classroom management competence. Paper presented at the annual meeting of the Association of Teacher Educators, Orlando, 1979. ERIC. ED 170 273.
- Weinstein, R. S., and Middlestadt, S. E. Learning about the achievement hierarchy of the classroom: Through children's eyes. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, April 8-12, 1979. ERIC. ED 170 071.
- Winnie, P. and Marx, R. Perceptual problem solving. In P. L. Peterson and H. J. Walberg (Eds.), Research on teaching: Concepts, findings and implications. Berkeley, CA.: McCutchan, 1979.
- Woodfolk, A. E. Student learning and performance under varying conditions of teacher verbal and nonverbal evaluative communication. Journal of Educational Psychology, 70(1): 87-94, Feb. 1978.
- Workman, E. A., et al. The consultative merits of praise-ignore versus praise-reprimand instruction. Journal of School Psychology, 18(4): 373-80, Winter 1980.
- Worshan, M. E. and Evertson, C. M. Systems of student accountability for written work in junior high school English classes. R & D Report No. 6105. Austin: - Texas Univ. Research and Development Center for Teacher Education, 1980. ERIC. ED 196 008.
- Yager, R. E. and Penick, J. E. What students say about science teaching and science teachers. Science Education, 68(2), 1984.
- Young, C. B. Talk and control. The Canadian School Executive, March 1984.
- Zingle, H. W. The relationship of the affective and cognitive domains. Mimeographic paper. Alberta Education. 1984.



Planning Services

Alberta

**PLANNING FOR AN EVALUATION
OF TEACHING PERFORMANCE**

VOLUME III

**Evaluation Procedures: Annotated
Bibliography and References**

**Compiled by
L. Yuzdepski**

**With
L. Elliott**

**Planning Services
Alberta Education
August, 1985**

FOREWORD

Planning for an Evaluation of Teaching Performance comprises four separately bound volumes: A Manual of Guidelines, (Vol. I); Teacher Effectiveness: Annotated Bibliography and References, (Vol. II); Evaluation Procedures: Annotated Bibliography and References, (Vol. III); and Summaries of Instruments for Use in Evaluating Teaching Performance, (Vol. IV).

The content is delimited to gathering and interpreting information about teaching and learning in classroom settings. The main focus is on behaviors of teachers that research has shown to be consistently associated with academic learning by pupils. Some attention is also directed to several classroom behaviors of pupils often found to correlate with effective learning.

The contents of the publication are intended to be used as guidelines. Readers should feel free to reject, adapt or adopt the ideas communicated as local needs dictate. All school jurisdictions have policy and structures in place for evaluating teaching performance. Hence, selections from these volumes might be identified and used in reviewing local policies, guidelines and procedures.

The companion publication, Evaluating and Improving Teaching Performance: An Inservice Kit, by Dr. Laurie Mireau is designed primarily for inservice settings. The Inservice Kit is designed for "hands-on" experience by individuals and by groups at the school and district levels. The Kit illustrates and emphasizes practical considerations and procedures useful in evaluating classroom activities and for integrating these with supervision of instruction.

An integral part of the Kit is a set of 30 videotapes (14 training tapes and 16 demonstration tapes) involving eleven classroom teachers in Edmonton Public Schools. The reader is directed to A Manual of Guidelines, (Vol. I), Appendix 2, for detailed descriptions of the 30 videotapes.

VOLUME III

EVALUATION PROCEDURES: ANNOTATED BIBLIOGRAPHY AND REFERENCES

Introduction

This volume includes:

- 1) An annotated bibliography
- 2) Audio-visual materials
- 3) A bibliography to include references not annotated

The annotations in this volume are organized according to the following topics:

- A. Planning for an Evaluation of Teaching Performance
 - Data Sources (other than Observation)
- B. Systematic Observation of Teaching Behaviors and Classroom Transactions
 - 1) Supervisor Observation
 - 2) Peer Observation/Colleague Observation
 - 3) Self-Assessment of Teaching Performance
 - 4) Student Perception
- C. Orienting and Training the Evaluator and Teachers
- D. Follow-up
 - 1) Analysis and Interpretation of Data
 - 2) Conferencing
 - 3) Report Writing

Note:

1. Many of the annotations listed are from a) published annotated bibliographies, b) the author's annotation, and c) the publisher's annotation.
2. Neither the printed nor the audio-visual materials have been evaluated.

Annotated Bibliography

EVALUATION PROCEDURES

A. Planning for an Evaluation of Teaching Performance

Allen, K. H. and Jarvis, M. E. Analyzing teacher evaluation policies and procedures with case law. Paper presented at the annual meeting of the American Educational Research Association, Quebec, Canada, 1983. ERIC. ED 239 407.

The evaluation policies and procedures in five Utah school districts are analyzed to derive a composite picture of factors that can leave a school district vulnerable to litigation. Factors examined include: 1) stated criteria not clearly tied to a teaching task, 2) performance criteria not clearly defined in terms of observable behaviours or explicit standards, and 3) no evaluator training or guarantee of reliability and consistency. Landmark court decisions that bear on validity of rating systems are cited.

Barnes, S. Synthesis of selected research on teacher findings. Report No. 9009. Austin: Texas University Research and Development Center for Teacher Education, 1981. ERIC ED 223 569.

An overview of research on elementary, secondary classroom teaching presents a synthesis of findings from large-scale classroom-based studies on teacher effectiveness. Three sets of major research efforts, dealing with classroom management and organization, systematic instruction, and effective instruction were selected for review. Selected variables from these studies are documented in tabular form, and a profile of an effective teacher is presented.

Beach, D. M. and Reinhartz, J. What is good teaching? - Using criteria of effective teaching to judge teacher performance. NASSP Bulletin, 68(475): 31-37, 1984.

Each school district must first determine what good teaching is, then develop its own list of research variables that will be used to judge how teachers perform in their classrooms. The model described in this article has grouped variables into the following six teacher skill areas: 1) clarity; 2) enthusiasm; 3) task orientation; 4) instructional strategies; 5) interaction with students; and 6) interesting questions.

Beckham, J. C. Guide to teacher evaluation. The Trustee, 52(2): 11-12, Summer 1982.

The fifteen guidelines which are outlined in this article emphasize the importance of procedural safeguards and substantive criteria in the evaluation process as extrapolated from existing case law.

Beckham, J. Legal aspects of teacher evaluation. Topeka, Kansas: National Organization on Legal Problems of Education, 1981.

Recent court decisions (American) surveyed in this document emphasize the importance of definitive, reasoned standards for teacher evaluation; the systematic gathering of evidence to support decisions material and relevant to those standards; and the consistent and uniform application of those standards in the many contexts of employment decision-making. A defined, acceptable standard of teaching, known in advance, is the essential precursor to implementation of a teacher evaluation system in public schools. A functional standard for teacher employment decisions requires three steps. First, the school system must determine, in advance, the knowledge, skills and competencies it requires. Second the system must develop evaluative mechanisms for identifying and preventing incompetence through early recognition of teaching deficiencies. Third, the teacher must be both adequately informed of the standards he or she must meet and provided with an opportunity to correct deficiencies once identified.

Blacker, D. A. Focus: Improvement of instruction. The Trustee, 52(2): 3-6, Summer 1982.

Suggests that a performance evaluation process focus on the improvement of instruction and which holds teachers accountable for only those variables which they control. The Hunter model is proposed for consideration. Madeline Hunter has identified teaching as decision-making and proposed that the decisions which are made by the teacher generally fall into one of three dimensions: content, learner behaviors, and teacher behaviors. Using the work of Hunter as a nucleus, the project which was undertaken by the Red Deer public school district is briefly described.

Blecke, A. E. Encouraging teacher support for teacher evaluations. NASSP Bulletin, 66(458): 16-21, 1983.

Developed by a faculty committee, this teacher evaluation system calls for teachers to prescribe methods for improving their own instructional processes. Procedures for problem evaluation, routine evaluation, and probationary evaluation are listed and an evaluation form is presented.

Bridges, E. M. Improving instruction and education: Managing the less competent teacher. IFG Policy Perspectives, 1-4, Winter 1984.

Eight elements comprising a useful approach in dealing with unsatisfactory performers are as follows: 1) establish "Excellence in Teaching" as a district priority; 2) adopt and publish reasonable criteria for evaluating teaching; 3) establish sound procedures for determining whether teachers satisfy the criteria; 4) provide appropriate remediation and a reasonable time to improve; 5) establish procedures to ensure that supervisors have requisite competence; 6) provide the necessary resources; 7) hold supervisors accountable; and 8) provide a fair hearing to the incompetent teacher prior to dismissal.

Brophy, J. E. Successful teaching strategies for the inner-city child. Phi Delta Kappan, 63(8): 527-30, Apr. 1982.

A significant body of research, including several large-scale correlational studies, indicates that effective teachers of the basic skills differ systematically from those who are ineffective. Eight teacher characteristics are associated with success in producing achievement gains, including expectations, classroom management, curriculum pacing, active teaching, and teaching to mastery.

Cangelosi, J. S. Evaluating teaching: A suggestion for principals. NASSP Bulletin, 68(475): 19-23, 1984.

Suggests that teachers be held accountable only for how well they adhere to sound principles of pedagogy. A procedure for principles to use to evaluate teachers is described here.

Carey, W. C. Tactful teacher evaluations. A guide for the site administrator. (Finding pleasant ways to say unpleasant things). Salem, Oregon: Options Press, 1983.

This book focusses on those teachers exhibiting marginal behaviour regarding which a record must be maintained. It has been designed to assist the principal in developing techniques to assist in preparing a usable record while protecting the working relationship with the teacher. It may be used (1) as a self-study guide, (2) in small study groups or (3) as a basis of a formal workshop.

Carey, W. C. Redesigning your teacher evaluation system. A guide for the evaluation committee. Salem, Oregon: Options Press, 1983.

This book explores a variety of questions and issues that relate both to the problems faced by the evaluator and the person whose performance is being assessed. Chapter headings include: The Classroom Observation; Evaluation Conferences; Evaluating the Evaluation System; District Reporting, Training and Orientation.

Carey, W. C. Managing your teacher evaluation system. (A video-supported workshop). Salem, Oregon: Options Press, 1982.

Carey, W. C. The DTD (Documenting teacher dismissal) in-service guide. Salem, Oregon: Options Press, 1982.

Carey, W. C. Documenting teacher dismissal. Salem, Oregon: Options Press, 1981.

The expressed purpose of this book is to develop evaluation materials that are defensible and supportive during the dismissal process. It is designed to be used 1) as a self-study guide, 2) in small study groups, or 3) as a basis of a formal workshop.

Emans, R. Teaching behaviours in reading instruction: A review of the research and critique. Paper presented at the annual meeting of the American Association of Colleges for Teacher Education, Detroit, 1983. ERIC. ED 227 093.

Reporting on research conducted between 1966 and 1972, this paper is intended to help all elementary teachers become more active in ways to improve student learning. Some of the subjects covered in the studies include: instructional time and student achievement; direct instruction; classroom climate; teacher praise and criticism; teacher expectations; and teachers' use of questions.

Erickson, C. M. Education to help people grow. The Trustee, 52(2): 9-11, Summer 1982.

The evaluation policy developed in the County of Red Deer is briefly described.

Feldvebel, A. M. Teacher evaluation: Ingredients of a credible model. The Clearinghouse, 53(9): 415-420, 1980.

A general discussion of teacher evaluation and evaluation criteria (presage, process, and product). Alternative models for teacher evaluation based on the evaluation criteria (presage, process, product, and process-product) are discussed.

Fordham, A. The context of teaching and learning in studies of teacher effectiveness. Studies in Educational Evaluation, 8(2): 111-28, 1982.

Four categories of context variables relating to teaching and learning in studies of teacher effectiveness are examined: teacher characteristics, school policy and organization, instructional setting, and student characteristics. It is argued that, by identifying controlled constraints within which teachers make decisions, teachers will be better able to select appropriate teaching strategies.

Foster, D. C. Selection of evaluation criteria for the development of a teacher assessment system. (Research report No. 84-1). Seattle, WA: Washington University Teacher Education Research Center, 1984. ERIC. ED 242 719.

A procedure was developed to systematically reduce 199 indicators of teaching effectiveness to a manageable number for use in the University of Washington's student teacher assessment system. The Teaching Performance Assessment Instrument from the University of Georgia was used as a model for grouping the indicators. The analysis resulted in 47 indicators of teaching effectiveness in three major categories: planning, instruction, and professional responsibilities. Validation of the system involved sending copies of the instrument to 31 selected authorities in the field.

Fredrich, G. H. Supervision and evaluation - recognizing the difference can increase value, effectiveness. NASSP Bulletin, 68(475): 12-18, 1984.

Contents that supervision and evaluation represent different functions and must be dealt with by different personnel.

Goldstein, W. Supervision made simple. (Fastback 180). Bloomington, IN: Phi Delta Kappa Educational Foundation, 1982. ERIC. ED 225 286.

Written to assist school administrators, this handbook discusses types of teacher supervision and evaluation. Included are five "fictions" about teacher evaluation, eleven criteria for judging teacher performance, uses and abuses of evaluation checklists, and seventeen guidelines for teacher supervision.

Haertel, G. D., et al. Psychological models of educational performance: A theoretical synthesis of constructs. Review of Educational Research, 53(1): 75-91, Spring 1983.

This review compares and contrasts eight instructional models presenting holistic conceptions of student learning in classroom settings. Major constructs posited by different theorists are cross-tabulated and related to factors of the model of educational productivity.

Huitt, W. G. and Segars, K. Characteristics of effective classrooms. Philadelphia, P.A.: Research for Better Schools, Inc., 1980. ERIC. ED 207 216.

Four key characteristics of effective classrooms in elementary and secondary schools are identified. The four characteristics encompass (1) teacher attention to learning characteristics, including prior learning and learning styles; (2) congruence among the course goals, what the teacher teaches, and the knowledge and skills assessed by test instruments; (3) the amount of student engaged time; and (4) the degree of success a student experiences on educational tasks during the school day.

Information Collection. Time Leader's Guide. Basic skills instructional improvement program. Philadelphia, Pa.: Research for Better Schools, Inc., 1980. ERIC. ED 193 200.

The improvement of student engaged time leads to improved instruction and greater academic achievement. This leader's guide can be used to: 1) teach procedures for information collection on time; 2) train classroom observers; and 3) collect information on allocated time and engagement rate in classrooms. Instructional materials to be used in this program are included. The program is comprised of four sections which give detailed suggestions for the topics and activities associated with applying the instructional improvement cycle to student engaged time. These are: 1) Information Collection; 2) Comparison and Identification; 3) Selection and Preparation; and 4) Implementation and Recycling.

McGreal, T.L. Developing a teacher evaluation system: Commonalities of these systems that function most effectively. Paper presented at the annual meeting of the Association for Supervision and Curriculum Development, Anaheim, CA., 1982. ERIC. ED 226 418

Characteristics that seem to separate effective and ineffective teacher evaluation systems provide a framework for viewing existing evaluation systems and determining necessary changes. Among the characteristics shared by effective systems were: 1) Participants felt that the purpose of evaluation was to provide assistance in instructional improvement; 2) Evaluation requirements reflected those in the school system; 3) Teacher evaluation was different from teaching evaluation; 4) Attention was paid to participative goal-setting, pre-evaluation conferences, tenure status, and training for teachers and supervisors; and 5) Student evaluation and achievement were used in addition to classroom observations.

Medley, D. M. Teacher competency testing and the teacher educator. Published jointly by the Association of Teacher Educators and the Bureau of Educational Research, University of Virginia, 1982.

Working toward systematic observation and evaluation system, Medley defines three major kinds of professional competencies that need to be assessed: 1) teacher effectiveness; 2) teacher performance; 3) repertoire of professional knowledge; professional skills/abilities; and professional attitudes/value positions. The 43-page booklet elaborates on each of these aspects.

Medley, D., Soar, R. and Coker, H. The minimum conditions for valid evaluation of teacher performance. Journal of Classroom Interaction, 19(1): 22-27, 1984.

Four elements comprise the minimum conditions for valid evaluation of teacher performance. These are: 1) setting, defining, or agreeing upon a task to be performed; 2) making a documentary, quantifiable record of behavior of the teacher while the task is being performed; 3) quantifying the record, that is deriving a score or set of scores from it; and 4) comparing the score with a predetermined standard. The purpose and rationale of each step and how each fits into the process of evaluation of teacher performance is examined.

Miley, A. Procedures for classroom observations 1973-1974. Technical Report #19. Honolulu: Kamehameha Schools. Kamehameha Early Education Project, 1974. ERIC. ED 158 844.

This report describes classroom observation undertaken at KEEP (Kamehameha Early Education Program) during the school year 1973-1974. Behaviour of both students and educational specialists (ES) who functioned as teachers, was observed and recorded daily from September 24, 1973, until June 7, 1974. Student observations focused on task orientation and disruptive behaviour. ES observation focused on reinforcement behaviour. The report includes a general description of the observation situation, a description of the codes used, including categories and method of observation, an analysis of some unsuccessful attempts in teacher code development, and a discussion of reliability.

Munroe, M. J. Teaching behaviours effective in mainstream classrooms. Paper presented at the annual state conference of the Arizona Federation Council for Exceptional Children, Tucson, 1982. ERIC. ED 213 679.

Good teaching has generic components appropriate for facilitating the learning of all children. Some of these include: 1) structured time and a business-like climate; 2) questioning skills that aid understanding and problem solving and that evidence sensitivity to student learning preference; 3) praise and encouragement; 4) use of accurate, prompt feedback; and 5) performance standards and teacher expectations that emphasize learning and achievement.

Natriello, G. Teachers' perceptions of the frequency of evaluation and assessments of their effort and effectiveness. American Educational Research Journal, 21(3): 579-595, 1984.

This article examines the relationship between teacher perceptions of the frequency of evaluation activity and their assessments of their effort and effectiveness.

Natriello, G. Evaluation frequency, teacher influence and internalization of evaluation processes: A review of six studies using the theory of evaluation and authority. Final report. Eugene, OR: Oregon University, Center for Educational Policy and Management, 1983. ERIC. ED 242 050.

A conceptual framework was developed to consider two dimensions of evaluation systems likely to lead performers to internalize the evaluation process. The theory of evaluation and authority developed by Dornbusch and Scott provided the basis for a review of six studies in support of two propositions: 1) The more frequently performers are evaluated, the more frequently they are likely to accept or internalize the evaluation process (up to a point); and 2) The more influence performers have over evaluation, the more likely they will be to accept and to internalize the evaluation process.

Oliva, F. and Henson, T. What are the essential generic teaching competencies? Theory into Practice, 19(2): 117-21, Spring 1980.

This article details the attitudes, skills, and characteristics of an effective teacher. A list of 23 generic competencies in the areas of communication skills, basic knowledge, technical skills, interpersonal skills, and administrative skills is given. The State of Florida has now included the 23 generic competencies in state policy requiring all persons to demonstrate them in order to be certified as a teacher in the state.

Oliver, B. Desirable qualities in teacher performance appraisal systems. Teacher Educator, 18(3): 26-30, 1982.

Nine recommended guidelines for teacher performance appraisal involve a reward system, evaluation training, teacher involvement, classroom improvement, peer observation, alternative data collection, paper-work, and supervisors.

Pattavina, P. and Ramirez, R. Generic affective teaching competencies, and personal efficacy needs of Hispanic students in public schools. Paper presented at the Council for Exceptional Children Conference on the Exceptional Bilingual Child, New Orleans, 1981. ERIC. ED 207 291.

"Generic affective competencies" are those required by any teacher attempting to "motivate", "manage", and "involve" students who are vulnerable in educational settings. Included in this report are 1) a description of the GAC "model", 2) a description of the learning needs of Hispanic-speaking students, and 3) a summary of consensual-validation research activities.

Peters, K. Methodological problems in teacher evaluation. Journal of Research and Development in Education, 17(4): 62-70, 1984.

Current interest in teacher evaluation indicates a need for better evaluation techniques. The methodological problems in teacher evaluation are explored through a discussion of audiences, models, sources of data, and modes of reporting. Directions for development by researchers and practitioners are presented.

Peterson, D. Legal and ethical issues of teacher evaluation: A research based approach. Educational Research Quarterly, 7(4): 6-16, 1983.

Knowledge of issues that include due process, discrimination, validity, reliability, and inference will assist school administrators in reworking evaluation systems to meet legal and ethical requirements. In so doing, systems become more research based, accurate, and of value in improving teacher effectiveness and providing defensible evidence for retaining or dismissing teachers.

Peterson, K. and Kauchak, D. Progress on development of lines of evidence for the evaluation of public school teaching. Paper presented at the annual meeting of the American Educational Research Association, Montreal Canada, 1983.

This preliminary report describes the literature review and analysis of current practices conducted to determine recommended teacher evaluation techniques for the Utah Teacher Evaluation Project. Seven promising "lines of evidence" are identified: 1) pupil report, 2) peer review and materials, 3) teacher tests. 4) administrator rating, 5) systematic observation, 6) pupil gain in special cases, and 7) special or idiosyncratic cases.

Pike, Kathy Have you disabled a student today. A look at teacher effectiveness. Paper presented at the annual meeting of the International Reading Association, Chicago, 1982. ERIC. ED 216 311.

The research on teacher effectiveness reviewed in this paper focusses on teaching as behaving, and teaching as thinking. It is noted that teaching is a process of allocating instructional time and assigning academic tasks in such a way that students have opportunities to learn while experiencing a high rate of success and engagement time, and that teaching is a complex process involving more than just a series of discrete, unrelated behaviours.

Powell, M. Variable teaching behaviours: The importance of considering context in understanding teaching. Educational Research Quarterly, 4(2): 36-42, Summer 1979.

Observation data from 46 classrooms demonstrated the importance of context in understanding teacher behaviour. Student-teacher interactions for explaining and giving directions occurred a statistically different number of times in self-paced and other-paced (group or interactive) settings.

Snyder, K. J. Imperatives in staff training, evaluation, and management. Paper presented at the annual meeting of the American Educational Research Association, Los Angeles, 1981. ERIC. ED 208 588.

Presents a model for developing a district-wide goal-based/role-based performance system. The model is in three parts: Part 1 defines the targets for district improvement efforts and the beliefs about those targets; Part 2 provides district standards for the performance of all role sets; and Part 3 presents the process for managing organizational behaviour (individual performances) to complement selected district priorities.

Soar, R. S. and Soar, R. M. Setting variables, classroom interaction, and multiple pupil outcomes. Final Report. Gainesville: Florida University Institute for Development of Human Resources, 1978. ERIC. ED 225 999.

Underscores the complexity of conceptualizing effective teaching which takes into account differences in the pupils being taught. It suggests we ignore that complexity at some cost.

Stodolsky, S. S. Teacher evaluation: The limits of looking. Educational Researcher, November, 11-18, 1984.

In this article, Stodolsky argues that effective teaching is not characterized by one set of behaviors that are context-free. Rather, teaching must be seen context-bound. Conceptual and empirical arguments are presented to challenge the validity of most teacher evaluation procedures that use observations of teachers. Suggestions include: substantially increasing the number of observations; considering a "showcase" lesson; and using observations as only one type of information.

Streich, W. H. The anthropological field method of classroom observation and teaching evaluation. ERIC. ED 243 196.

While most theories of educational administration hold that organizations work best when they mediate between organizational goals and individual needs, the two major observational methods of teacher evaluation (checklist and clinical supervision) emphasize one or the other. The anthropological field method, however, encompasses both dimensions. Three stages are involved: 1) supervisor observation; 2) formulation and verification of propositions regarding classroom behaviour patterns; and 3) supervisor and teacher conferences to evaluate teacher performance and to design an inservice training course.

Strike, K. A. and Millman, J. Nontechnical questions about teacher evaluation systems in elementary and secondary schools: A research agenda. Educational Evaluation and Policy Analysis, 5(4): 389-397, 1983.

Discussed in this article are issues raised about the context for teacher evaluation, such as legal and political questions, staff and student diversity, teachers' roles, organizational structures, humane evaluation practices and types of evidence.

Sweeney, J. Assessing teachers as humanists and team players. The Trustee, 50(4): 12-13, 1980.

Evaluative criteria for the roles of teachers as humanists and as institutional representatives are described.

Texas Junior High School Study: Final Report of Process-Outcome Relationships; Classroom Observation Scales. Appendix B. Austin: Texas University Research and Development Center for Teacher Education, 1978. ERIC. ED 173 746.

This is a third in a series of four reports describing a study of 1,614 junior high school mathematics and English students and 69 of their teachers that was undertaken to discover the effects of different teaching behaviours on cognition and affective student outcomes. This booklet contains a discussion of different types of direct observation techniques, including their advantages and disadvantages; 12 scales for use in classroom observation, including definitions of the scales' behaviours and some examples; and a discussion of reliability data for the scales, including between-observer agreement and stability estimates. Five observational systems were used: OSCARS (Medley, et al, 1968), FAIR (Fuller, 1970), CASES (Spaulding, 1970), Dyadic (Good and Brophy, 1970), and CCS (Emmer and Albrecht, 1970).

Troisi, N. F. Effective teaching and student achievement. Reston, Va.: National Association of Secondary School Principals, 1983. ERIC. ED 231 067 Microfiche.

Effective teachers are successful in planning and preparation, classroom management, and student evaluation, but the study concludes that the key to establishing and maintaining a climate conducive to academic achievement is effective administrative leadership.

Vogt, C.G. Developing a teacher evaluation system. Spectrum, 2(1): 41-46.

This article describes a teacher evaluation system which is based on a list of criteria for effective teaching compiled by a task force of teachers and administrators in a Wyoming school district. These criteria became the basis for teacher job descriptions and for forms used in classroom observations.

Ward, B. A., et al. An expanded view of the student outcomes that are built or restrained by teaching processes and structures. San Francisco: Far West Lab. for Educational Research and Development, 1981. ERIC. ED 223 585.

Indicators of teaching effectiveness are believed to be: 1) agreement between teacher intent and student understanding of what is to be learned/accomplished/produced; 2) congruence between schooling goals and the student participation requirements of the classroom; 3) use of time in the classroom; and 4) students' views of themselves and others. It is suggested that, if these indicators occur in an observable short time period of each classroom and if they accumulate over several years of schooling, students will have successful schooling experiences and will attain the general goals of education.

Waxman, H. C. Evaluating teachers by alternate distribution criteria. Education, 104(3): 305-310, 1984.

The author describes and applies several alternative distribution criteria to secondary analysis of pre- and post- achievement scores from 15 sixth-grade classrooms. Examples illustrate how a teacher could be considered effective under one criterion but ineffective under another. Policy implications are discussed.

Weinrott, M. R., et al. Convergent and discriminant validity of five classroom observation systems: A secondary analysis. Journal of Educational Psychology, 73 (5): 671-80, Oct. 1981.

A secondary analysis was conducted to test the validity of five behaviours from five classroom observation systems: approves/praises; asks questions; criticizes/disapproves; gives directions; and presents facts or judgements. Scores for each were intercorrelated and arranged in a multitrait-multimethod matrix. Evidence was found of construct validity for all behaviours examined.

Weinstein, C. S. and Woolfolk, A. E. Impression formation and classroom design: The impact of spatial arrangement and neatness on judgements of teachers. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979. ERIC 172 717.

The impact of classroom arrangement (open vs. traditional) and tidiness (messy vs. neat) on observer's expectations about a teacher was examined. A heterogeneous sample of college students was shown color slides of vacant elementary classrooms varying in terms of these two dimensions. Subjects' impressions of the teacher were assessed by revising Ryan's Classroom Observation Record (1970). For all factors of the questionnaire, (general pupil behavior, teacher kindness, teacher inventiveness, and teacher organization), a highly significant main effect was found for condition. Repeated measures analysis of variance demonstrated that observer's judgements of the occupants were strongly influenced by both the neatness and the arrangements of the rooms.

Wise, A. E., et al. Teacher evaluation. A study of effective practices. Santa Monica, CA: Rand, 1984.

This report describes a 1983 Rand study of teacher evaluation practices. The study focussed on the actual operation of teacher evaluation procedures in school systems. It examined instruments and procedures, as well as the implementation processes and the organizational contexts within which they operate. The authors present their findings, analyses, conclusions, and recommendations. The four case studies that provided most of the data for the report are summarized here; they are also being published separately as Case Studies for Teacher Evaluation: A Study of Effective Practices, June 1984 (Rand).

Data Sources (Other than Observation)

Anderson, L. M., Evertson, C. M. and Emmer, E. T. Dimensions in classroom management derived from recent research. Journal of Curriculum Studies, 12(4), 1980.

Although many studies describe the effects of establishing an efficient classroom management system, few have observed the actual development and maintenance of these systems. This article describes a study in which 27 teachers were observed throughout the year. The observers recorded in narrative form any behavior that related to classroom management. Content planning was a behavior that emerged consistently as one positively relating to classroom efficiency. This thorough planning allowed for maximum student time on task activities.

Bowermaster, J. Classroom management. Washington, D. C.: ERIC Clearinghouse, 1981. (ERIC Short Report #1).

This ERIC short report offers information on effective classroom managers. One of the characteristics of effective teachers is their ability to plan lessons according to the subject matter and the students. If planning is thorough, claims Bowermaster, less classroom time will be used for teacher organization.

Brown, R. D. Helpful and humane teacher evaluations. In W. R. Duckett (Ed.), Evaluation: Gathering and using data. A CEDR Monograph, Phi Delta Kappa, 1983.

Brown discusses many sources of data for use in the performance evaluation process. One less direct measure of teacher evaluation is student achievement on standardized tests, on teacher-made tests, and on homework assignments.

Centra, J. A. and Potter, D. A. School and teacher effects: An interrelational model. Review of Educational Research, 50(1), Summer 1980.

This review discusses school and teacher effects on student achievement and presents a model of factors that influence student progress. Centra and Potter emphasize the fact that non-cognitive student outcomes are as important as cognitive outcomes but more difficult to measure. Teaching behaviors that positively influence moral development, self-reliance, and career success may be different from those behaviors that would influence basic skills and higher order outcomes.

Eash, M. J. and Waxman, H. C. Students' perceptions of effective teaching in different subject areas. Paper presented at the annual meeting of the American Educational Research Association, Boston, 1980. ERIC. ED 191 913.

The question of whether certain teaching behaviours as perceived by students are related to the students' achievement in different subject areas is investigated. A revised questionnaire, Our Class and Its Work (OCIW), assesses student perceptions of teacher behaviour along the following nine scales: variability; enthusiasm; task-orientation; criticism; opportunity to learn; use of structuring comments; multiple levels of questioning; mismanagement; and sustainability. OCIW scales and previous academic achievement in two Chicago schools were entered as independent variables in a multiple regression equation predicting academic achievement for the current year. Results indicated that several OCIW scales are significant predictors of academic achievement and vary across academic subjects.

Hodgson, E. The Keegstra mess: An administrative report card. The Canadian School Executive, 3(9), March 1984.

Hodgson's article attacks the administrators involved in the James Keegstra affair. Keegstra, claims Hodgson, had been teaching a biased version of the social studies curriculum for over 10 years, yet school-based administrators say evaluation of Keegstra's classroom performance has occurred during this time. Asks Hodgson: Were student notebooks not reviewed? If they were, how thoroughly?

Ratsoy, E. W. and Sloan, L. V. Effective teaching as a focus for supervisory activity. Canadian Administrator, 20(7), April 1981.

Student teachers were the focus of this University of Alberta study, which concentrated in part on teacher planning. The quality of lesson plans from the beginning of teachers' practicum to the completion were received with regard to the specifications of objectives, selection of context, organization of material, and planning of instruction. Two results emerged: a) the lesson plans varied little from beginning to the end of the practice teaching and b) the quality of the lesson plans varied greatly from student to student. This last result suggests more attention need be given at the university level regarding lesson plan development.

Shavelson, R. J. and Stern, P. Research on teacher's pedagogical thoughts, judgments, decisions and behavior. Review of Educational Research, 51(4), Winter 1981.

Shavelson and Stern use various studies that emphasize the importance of teacher planning as an antecedent condition of effective teaching. The teacher will plan classroom activities based upon knowledge of the students and the nature of the instructional task. Once the task is formulated, it operates as a plan, mental image, or script from which the teacher behaves. The successful selection and integration of information by the teacher leads to an effective classroom situation.

Worsham, M. E. Student accountability for written work in junior high school classes. Austin: Texas Univ. Research and Development Center for Teacher Education, 1981. ERIC. ED 203 387.

The accountability systems for student written work of twelve junior high school mathematics teachers were examined for 1) clarity of overall work assignments, 2) procedures for communicating assignments and instructions to students, 3) teacher monitoring of work in progress, 4) routines for checking and turning in work, and 5) regular academic feedback to students. The characteristics of the effective teachers were then compared to those of effective junior high English teachers. Both were consistent in: treatment of assignment due dates, enforcing individual rules, efficient student monitoring, checking assignments regularly, recording grades immediately, and collecting papers to check themselves.

B. Systematic Observation of Teaching Behaviors and Classroom Transactions

1. Supervisor Observation

Diamond, S. Micro-supervisory experience, humanistic and clinical format. NASSP Bulletin, March 1980.

The humanistic and clinical micro-supervisory experience as outlined by Diamond in his article suggests a concentration on one goal or on one set of related goals as decided upon by the supervisor and supervisee. Diamond offers three general goals of his person-oriented model: a) to enhance the teacher's performance; b) to improve teacher self-image immediately; and c) to contribute to the improvement of instruction. The supervisor must be committed to the success of the teacher, must be a responsible partner in this developmental process, and must be open to learning as well as assisting the teacher.

Goldhammer, R., Anderson, R.J., and Krajewski, R.J. Clinical supervision: Special methods for the supervision of teachers (2nd ed.). New York: Holt, Rinehart & Winston, 1980.

This book describes the model of clinical supervision and its many advantages in positively influencing the development of successful teaching performance. Formative

evaluation by the in-school administrator is the focus, with a positive perception of supervision and staff improvement being two outcomes.

Ingle, R. B. Techniques for systematic observation. In W. Duckett (Ed.), Observation and the evaluation of teaching. A CEDR Monograph, Phi Delta Kappa, 1980.

Ingle asks teachers to recall a classroom visitation of years past by a "Person of Authority." This individual always spoke in capital letters and was surrounded by an aura of mystery. The criteria and the method of evaluation used were total unknowns. He floated in, observed, and he floated out -- you often wondered if it wasn't all a bad dream. Ingle presents some suggestions regarding systematic, structured observation techniques.

Lerch, R.D. The clinical model: The optimum approach to supervision. The Clearinghouse, 53, January 1980.

Lerch distinguishes between supervision, a helping relationship, and evaluation, an inspection relationship. The main purpose of supervision is to improve instruction. Improvement can be accomplished if teachers are assisted by supervisors through classroom observation of specific skills and through conferencing, as in the clinical supervision model outlined by Cogan and Goldhammer. Clinical supervision offers a concrete, positive approach to staff development.

Manatt, R. P., et al. Evaluating teacher performance with improved rating scales. NASSP Bulletin, 60(401): 21-24, 1976.

The authors present a 30-item teacher evaluation instrument along with a discussion of its application.

Ness, M. The administrator as instructional supervisor. Educational Leadership, Feb. 1980.

Mildred Ness, a New York principal, states that the supervisor of teaching performance can successfully function as an evaluator and consultant simultaneously. Evaluation poses no real threat when the teacher and supervisor have worked together for several years. Further, she claims that the consultative mode of administrator should be integrated into the administrative role to provide successful stimulation toward change.

Smyth, W. J. Principal's role: Teacher evaluation: Rationale, procedures. NAASP Bulletin, March 1980.

The primary purpose of the school is to facilitate learning. To achieve this goal, the principal must undergo a role change, from that of business manager to that of evaluator of instruction. The author believes the recent literature on teacher effectiveness is encouraging this re-emphasis on the principal as the educational supervisor.

Centra, J. A. Determining faculty effectiveness. San Francisco: Jossey-Bass, 1979.

Centra's book on faculty effectiveness at the post-secondary level contains a section on colleague evaluation. Chapter four outlines various methods of collecting data related to peer performance both inside and outside the classroom. The author believes observer training is important to the credibility of this evaluation system.

Darling-Hammond, L., Wise, A. E., and Pease, S. R. Teacher evaluation in organizational context: A review of the literature. Review of Educational Research, 53 (3), Fall 1983.

This article on teacher evaluation devotes a section to peer review as a possible component of the total evaluation procedure. Literature indicates that peers might evaluate performance in the classroom as well as analyze documents, intentionality, and appropriateness of subject matter because they may be in the best position to assess competence in these areas. The authors say that peer evaluation of teaching behaviors has received mixed reviews. Lewis (1982) found in one study that teachers lacked respect for colleague appraisals and the practice resulted in staff tension.

Ellis, E. C., Smith, J. T., and Abbott Jr., W. Peer observation: A means for supervisory acceptance. Educational Leadership, 36(6), March 1979.

The use of a peer observation clinical approach to supervision by an elementary school principal is described. A carefully designed program to include preplanning, teacher involvement, selection of two low-inference observation instruments, inservice training, needs assessments of individual teachers, and administrative support and involvement contributed to its success. The pre- and post-attitude scale completed by teachers indicated that teachers are more receptive to supervision when they have actively participated in its development.

Good, T. L. Classroom observation: Potential and problems. In W. R. Duckett (Ed.), Observation and the evaluation of teaching. A CEDR Monograph, Phi Delta Kappa, 1981.

Good describes many uses of classroom observation rather than just a technique for gathering evaluation data. He claims that teachers observing other teachers would introduce colleagues to different teaching styles and may lead to an increase in personal teaching awareness. The author discusses problems with evaluation and includes some instruments developed for the Missouri Mathematics Program study.

Grossnickle, G. R. and Cutter, T. W. It takes one to know one - Advocating colleagues as evaluators. NASSP Bulletin, February 1984.

Although the principal is the person most responsible for teacher evaluation, many do not feel this function has top priority. The authors outline a plan in which colleagues could evaluate each other with the help of teacher aides or parent volunteers who would take over some classroom monitoring and supervising duties in order to free the teachers involved. Training the teachers would be necessary to increase observation competence and information validity.

Hopfengardner, J. D. and Walker, R. Collegial support: An alternative to principal-led supervision of instruction. NASSP Bulletin, April 1984.

A collegial support system is offered as an alternative to administrator conducted supervision. Data collected from administrators and peers would be used to upgrade personal skills and to substantiate administrative decisions regarding contractual status. The authors offer information from several studies outlining the success and the potential of peer supervision.

McFaul, S. A. and Cooper, J. M. Peer clinical supervision theory vs. reality. Educational Leadership, April 1984.

A case study in peer clinical supervision conducted by McFaul in 1982 is described in this article. The participants trained in observation skills, collected classroom observation data in the form of checklists and ethnographic accounts, and conducted conferences. Analysis determined that although 11 of the 12 teachers in the elementary school involved executed the structure of peer clinical supervision, the supervision was not thorough in most cases. Pre-observation conferences, if conducted at all, were brief because of lack of time; insufficient data were collected to form meaningful generalizations; only 20% of the conferences involved in-depth analyses; and colleagues offered simplistic solutions to complex problems. In brief, McFaul and Cooper conclude that this study revealed an unwillingness on the teachers' part to make peers uncomfortable by criticism, and thus a superficial supervision practice emerged.

Rothberg, R. A. Helping teachers improve their teaching. The Clearinghouse, 53, 1979.

Peer assessment will alleviate some of the supervisory duties of the principal and can be a very effective alternative to conventional appraisal methods. Rothberg discusses the experience of an elementary school with 28 teachers who involved themselves successfully in a peer assessment, and found that 26 of the 28 teachers perceived an occurrence of real personal growth.

3. Self-Assessment of Teaching Performance

Alberta Teachers' Association. Cooperative assessment: A manual for teachers. ATA, June 1979.

Part III of the manual developed by the Alberta Teachers' Association is entitled Self-Evaluation. Section A of part III contains instruments for the use of teachers who wish to assess their performance in four major areas: Classroom Organization, Teacher/Pupil Relationships, Staff Relations, and Professional Attributes. The ATA believes that the purpose of self-assessment is personal growth and teachers view self-appraisal as the most effective method of examining one's teaching.

Beach, D. M. and Reinhartz, J. Improving instructional effectiveness. A self-assessment procedure. Illinois School Research and Development, 19(1): 5-12, 1982.

The self-assessment procedure described in this article is designed to foster instructional improvement. A self-assessment inventory is included.

Blake, R. H. Assessment of inquiry competencies in a performance-based teacher education program. Paper presented at the annual meeting of the Northern Rocky Mountain Educational Research Association, Jackson Hole, Wy., 1983. ERIC. ED 241 555.

This paper describes the use of the Inquiry Teaching Competency Assessment instrument which uses teacher and student behavioural indicators to assess the quality of inquiry instruction and the presence of critical teaching skills. It can be used by inservice or student teachers as a self-help aid.

Brown, R. D. Helpful and humane teacher evaluation. In W.R. Duckett (Ed.), Teacher evaluation: Gathering and using data. Bloomington, Indiana: Phi Delta Kappa, 1983.

Brown's article discusses many data-collecting sources such as interviews, peer ratings, and student ratings. He advocates that formal and informal self-evaluation is useful if conducted in conjunction with other data gathering strategies.

Centra, J. A. Determining faculty effectiveness. San Francisco: Jossey-Bass Pub., 1979.

In Chapter III of his book Centra claims that currently more teachers are making use of self-evaluation as a professional development tool than in the past. Mixed results have arisen from various research studies, some indicating positive relationships between teacher self-ratings and student/supervisor ratings, others resulting in no correlation. Several instruments and recommendations are included that may assist a system in integrating this appraisal form to a greater degree.

Iwanicki, E. F. and McEachern, L. Using teacher self-assessment to identify staff development needs. Journal of Teacher Education, 35(2), March-April 1984.

Iwanicki and McEachern suggest that a teacher may self-appraise using a combination of techniques such as observing her/his taped performance, analyzing student appraisal forms, discussion, and interviews with parents, colleagues, and administrators. Input from these data sources may lead to further information about the teacher's open and secret self, but may also disclose the blind and undiscovered self.

Iwanicki, E. F. and McEachern, L. Teacher self-improvement: A promising approach to professional development and school improvement. Journal of Staff Development, 4(1): 62-77, 1983.

Teacher self-improvement is a concept that can be used as part of a school's program for professional development and teacher evaluation. Methods for helping teachers evaluate their own performances, obtaining feedback from students and colleagues, designing self-improvement programs, and monitoring progress are described.

Pinola, M. Are you an "A" teacher? A short quiz for self evaluation. Education, 102(4), April 1982.

An open-ended questionnaire was distributed to 145 high school students. It asked these students to describe the major strengths of their teachers. It was discovered that the results were consistent, and Pinola organized the responses into seven major categories. A checklist of these categories is presented for a teacher who wishes to appraise her/his performance.

Riley, R. D., and Schaffer, E. C. Self-Certification: Accounting to oneself. Journal of Teacher Education, 30(2): 23-26, 1979.

This article is intended to give teachers ways to look at and improve their teaching. The activities and suggestions have been designed to increase awareness of the skills and characteristics that teachers already have at their disposal to be effective teachers, and to offer them new ways to develop skills and strategies that they believe will increase their classroom effectiveness. (Excerpt from article).

Ryan, D. W. and Butler, L. F. Effectiveness of teaching: The Canadian experience. Studies in Educational Evaluation, 7, 1982.

Studies of effective teaching conducted throughout Canada is reviewed. Information regarding research completed at Queen's University in 1980 and material from the Ontario Institute of Studies in Education is included. Both institutes have become active in researching the field of teacher self-assessment and conclude that formal and informal self-appraisal will benefit the teacher by resulting in a more thorough awareness of personal performance.

Waimon, M. D., et al. Using product analysis to develop self-improvement skills in CBTE programs, 1979. ERIC. ED 175 810.

It was hypothesized that a structural analysis of pupil outcomes will improve the attitudes and performance of prospective teachers. This procedure, known as Product Analysis, is a self-regulation technique based on the assumption that teachers who are able to monitor the effects of their teaching behaviour on student achievement will alter that behaviour appropriately to maximize positive effects. Two groups of prospective teachers were used as subjects to test this hypothesis. One group received training in using the Product Analysis technique, the other did not. Subsequent test results of the two groups indicated significant behaviour change in the training group and substantially higher pupil achievement.

4. Student Perception

Cohen, P. A. Synthesizing research results on teacher evaluation using meta-analytic procedures. Paper presented at the annual meeting of the American Psychological Association, Washington, D.C., 1982. ERIC. ED 223 646.

A meta-analysis of the literature on student evaluation of teaching is presented. The research supports the validity of student ratings as measures of teaching effectiveness. Findings demonstrate that the relationship between ratings and achievement is stronger and more consistent than was previously thought.

Cromack, T. R. and Eigelston, R. L. Students as the source of information concerning teacher behaviors: New concepts in the appraisal of instruction. Journal of Classroom Interaction, Winter 1979.

Cromack and Eigelston believe that nobody knows the performance of the teacher better than the students of that teacher. The authors believe that for student assessment of teaching performance to be useful, the items should be formative, assessments administered early enough and with the same students in order for a change of behavior to occur, and items concerned only with specific observable classroom activities incorporated in the instrument.

Gilman, F. Student attitudes and classroom climate: A survey of recent literature. Journal of Classroom Interaction, 19(1), Winter 1983.

Gilman's article lists and annotates recent journal articles and ERIC documents that pertain to student attitudes of teaching performance. Feedback from students can be extremely valuable as a tool for encouraging staff development and effective teaching. The research listed in this review substantiates this.

Fox, R., Peck, R. F., Blattstein, A., and Blattstein, D. Student evaluation of teacher as a measure of teacher behavior and teacher impact on students. The Journal of Educational Research, 77(1), Sept.-Oct 1983.

This research article contains a literature review and summarizes a study completed by the authors regarding student evaluation of instruction. Teacher behavior, student coping skills, self-esteem, student achievement, and socio-economic status were the variables applied in this study. This research found that low and high self-esteem students employed different criteria for judging teacher behaviors.

McCaleb, J. L. and Rosenthal, B. G. Relationships in teacher clarity between student's perceptions and observers' ratings. Journal of Classroom Interaction, 19(1), Winter 1983.

This research article outlines two related studies that attempted to define teacher clarity. Perceptions of clarity were gathered from learners and observers in the first study and placed on several instruments. In the second study, these instruments were

tested for validity and consistency by observers and learners. Many interesting discoveries resulted from this research. Although teachers were rated higher by different groups of students the second time they taught the same lesson, observer ratings of teaching performance did not show any significant difference between first and second lessons. Because the students responded on a general basis and observers responded to specific categories of behaviors, the assumption might be made that observer appraisal is more accurate.

Stillman, P. L., Gillers, M. A., Heins, M., Nicholson, G., and Sabers, D. L. Journal of Medical Education, 58, March 1983.

Although this study was conducted in the medical field, its results have implication for the educational system. Instructors were evaluated by students and peers teaching the same lesson to different students in two separate years. It was found that after receiving feedback from students regarding the lesson, instructors improved their delivery the second time they conducted the class. The authors believe that immediate student feedback is a powerful technique of teacher evaluation and can result in changes leading to course improvement.

Sullivan, D. K., et al. Implementation of the Stallings classroom management staff development demonstration project in Putnam County, West Virginia. Charleston, W. Va.: Appalachia Educational Lab., 1981. ERIC. ED 225 976.

In this report, an in-depth overview of the implementation of the Stallings model is presented. Included is information on: 1) the data collection process; 2) data analysis and interpretation; 3) teacher training processes; 4) project objectives, rationale, and history; 5) characteristics of the schools involved in the project; 6) demonstration project methods and procedures; and 7) project evaluation.

C. Orienting and Training the Evaluator and Teachers

Anderson, R. H. Improving your supervision skills. National Elementary Principal, June 1979.

Anderson describes Cogan's (1973) "O Cycle" in which principals formed a team and observed classroom teachers. The objective of this approach is to provide for growth in administrator supervisory skills. The fact that from two to six team members work together allows each individual the opportunity to compare observation measurements with colleagues.

Borich, D., et al. Convergent and discriminant validity of five classroom observation systems: Testing a model. Journal of Educational Psychology, 70(2): 119-28, April 1978.

Using five readily available classroom observation systems, three 50-minute videotapes of classroom interaction were rated for each of twelve social studies

teachers. Comparisons yielded 23 categories that measured similar behaviours across systems, approximately half of which satisfied all validity tests. Implications for process - product studies and the convergent and discriminant validity model are discussed.

Capie, W., et al. Teacher performance assessment instruments. Athens, Georgia: University of Georgia, School of Education, 1979. ERIC. ED 182 518.

The Teacher Performance Assessment Instruments (TPAI) designed to determine (for certification purposes) how well teachers can demonstrate certain minimum teaching skills considered essential to effective teaching are reproduced in this document. The five evaluating instruments used are: 1) teaching plans and materials; 2) classroom procedures; 3) interpersonal skills; 4) professional standards; and 5) student perceptions. Each instrument is prefaced by a description of its purpose and conditions for use. Procedures for processing and reporting data derived from an assessment are included.

Emmer, T., et al. The classroom management improvement study: An experiment in elementary school classrooms. Austin: Texas University Research and Development Center for Teacher Education, 1981. ERIC. ED 226 452.

This report provides an overview of the Classroom Management Improvement Study (CMIS): its background, treatment design, methodology and instrumentation, analyses of the major hypotheses and research questions, and discussion of the implications of the results for research on management and for teacher training. After the text two-thirds of the document consists of 15 data tables and 14 appendices that include teacher workshop materials, a list of teacher manual contents, observer guidelines, all instruments, and teacher interview protocols.

Evertson, C. M., et al. Report of the methodology, rationale, and instrumentation of the junior high classroom organization study. RTD Report No. 6100. Austin: Texas University Research and Development Center for Teacher Education, 1980. ERIC. ED 189 076.

This report contains a complete record of the methodology and instrumentation of the Junior High School Organization Study. The purpose of the study was to delineate specific effective teacher behaviours. Included in this report are a description of the selection and training of observers, and guidelines for writing narrative descriptions, coding observations, rating student engagement time, and noting time intervals on the narrative record. Sample forms for these procedures are presented. Samples are also given of data collection instruments used throughout the year-long observation period, including questionnaires sent to participating teachers, resulting feedback to teachers, and data analysis instruments.

Evertson, C. M. and Anderson, L. M. Interim progress report: The classroom organization study. Correlates of effective teaching. Austin: Texas University Research and Development Center for Teacher Education, 1978. ERIC ED 167 525.

The Classroom Organization Study was designed to answer specific questions about establishing and maintaining classroom organization that results in greater student time on task, exposure to content, and achievement. This progress report details the history of the study and describes data collection activities. Interviews, questionnaires, classroom observation and student engagement ratings are used to gather and analyze data.

Good, T. L. and Brophy, J. E. Looking in classrooms (3rd Ed.). New York: Harper & Row Publishers, 1984.

The third edition of this book expands the area of observation training techniques. Brophy and Good offer examples of instruments and necessary observer skills. They claim that the perfect teacher does not exist, but many studies indicate characteristics of effective teachers that can be employed successfully by all teaching personnel.

Hawley, R. C. Assessing teacher performance. Amherst, Mass.: Education Research Associates, 1982.

The tasks involved in teacher evaluation are analyzed, and evaluation activities such as observing, holding conferences, supervising, and writing reports are described.

Hawley, R. C. Evaluating teaching: A handbook of positive approaches. Amherst, Mass.: Education Research Associates, 1976.

A structure for planning and conducting evaluations is presented. Eighteen reproducible instruments and worksheets are included.

Hawley, R. C. and Hawley, J. L. Achieving better classroom discipline. Amherst, Mass.: Education Research Associates, 1981.

Assists supervisors to focus on specifics when working with teachers who need improvement in classroom management skills.

Heidelback, R. (Ed.). Developing supervisory practice. Washington, D. C.: Association of Teacher Educators, 1978.

Three papers provide material for facilitating the improvement of supervision.

Henderson, C. Musical accountability: The measurement of music teacher behaviours. Accentuating the positive, 1974. ERIC. ED 171 637.

This document describes a study of an inservice project to train teachers in the use of consistent verbal and nonverbal behaviours. Included in the workshop sessions were procedures for using the measurement instrument; and the observation, identification, and evaluation of specific teacher performances in classroom activities. Pre- and post-training classroom sessions were videotaped. Results indicated that after training, teachers became more aware of their behaviours in relation to classroom interaction.

Hyman, R. T. School administrator's handbook of teacher supervision and evaluation methods. Englewood Cliffs, N. J.: Prentice-Hall, 1975.

A basic work on the subject. Contains many instruments, including the Tuckman Teacher Feedback Form.

Kugle, C. L. Data collection procedures for the evaluation of teaching program, Phase II. Technical Report No. 5055. Austin: Texas University Research and Development Center for Teacher Education, 1978. ERIC. ED 170 340.

Coders practiced recording their observations of 36 existing classroom videotapes in order to determine the amount of interobserver agreement. Seven observation systems were used: Spaulding Teacher Activity Rating Schedule; Teacher-Child Dyadic Interaction System; Observation Schedule and Record Form; Flanders System of Interaction Analysis; Florida Climate and Control Systems; CERLI Verbal-Behaviour Classification System; and Classroom Observational Categories. Tables showing interobserver agreement on the 36 videotapes and coding directions for the observation instruments are appended.

Kugle, C. L. and Clements, R. O. One good look deserves another: Combining methodologies to describe classrooms. Report No. 5084. Austin: Texas University Research and Development Center for Teacher Education, 1980. ERIC. ED 192 293.

Qualitative and quantitative methodology in classroom observation were combined in this study that examined nine second grade reading classes. Each classroom was observed by an ethnographer and a classroom coder ten times throughout the year, and each observation lasted 90 minutes. The classroom observation system records classroom interactions in "frames" completed four times per hour. Results indicate that some type of narrative record, or series of interviews, always be used in conjunction with categorical observation systems.

Kyle, Jr. W. C., et al. Science laboratory interaction categories (SLIC): An instrument to observe and analyze the various parameters of activity-centered and vocational education classrooms. Technical Report 15.

An instrument is presented for recording and analyzing student and teacher behaviour in laboratory or activity-centered vocational education classrooms. The instrument

uses categories of behaviour, such as: 1) asks extended thought questions, 2) shows or illustrates, and 3) management of lesson for teachers; and categories such as: 1) asks questions, 2) reads lesson-related material, and 3) gets supplies or moves around the room, for student behaviour. The categories are recorded using single-letter codes, along with codes to indicate to whom the behaviour is being directed, and the sex of this person.

MacKay, D. A., and Osoba, E. C. New directions in teacher supervision. Centre for Research in Teaching, Faculty of Education, University of Alberta, 1978.

MacKay and Osoba discuss many aspects of the performance appraisal system and mention in particular the importance of collecting quality data. To facilitate data collection, appraisers must be thoroughly trained in proper observation techniques. Practice in identifying specific classroom behavior is essential, as well as accurate recording of behaviors.

McConnell, J. W. and Bowers, N. D. A comparison of high-inference and low-inference measures of teacher behaviours as predictors of pupil attitudes and achievements. Paper presented at the annual meeting of The American Educational Research Association, San Francisco, 1979. ERIC. ED 171 780.

Data derived from a year-long study of 43 algebra classes in 13 high schools were collected to assess the differences between high-inference and low-inference measures of teacher behaviour as predictors of pupil achievement and attitude change. The high inference systems rated characteristics such as enthusiasm and clarity while low-inference measures were often frequency counts of objective, specific teaching acts. From the results, it was concluded that both types of observation instruments should be used in process-product research.

Meehan, M. L. Evaluation of the Stallings classroom management staff development demonstration project in Putnam County, West Virginia. Charleston, W. Va.: Appalachia Educational Lab., 1981. ERIC. ED 225 977.

Overall, results of this evaluation show that the Stallings Classroom Management Staff Development Demonstration Project implemented in Putnam County Schools in 1980-81 was a success. Findings from five out of six data collection instruments/techniques lead to the conclusion of the project being a success.

Moore, T. J., and Neal, W. D. The evaluation of teaching performance. The Journal of Educational Administration, 7(2), October 1969.

Conducted in Victoria, Australia this study attempts to reach consensus regarding criteria employed in teacher performance appraisals. Inspectors were asked to list criteria they used when evaluating a teacher and several weeks later to complete a structured questionnaire upon which they indicated the relative importance of listed criteria. The unstructured survey resulted in the researchers' inability to isolate a common body of criteria. It was apparent that each inspector had his own personal value system or rationale on which he rated the effectiveness of a teacher.

Nasca, D., and Davis, H. B. Verbal interaction behaviours of teachers of the gifted, 1981. ERIC. ED 216 478.

Trained and untrained teachers (N=37) of gifted students (grades 2 through 6) were observed and compared in four areas. Teachers were trained in applying Bloom's taxonomy to questioning techniques and in using management strategies for individualized instruction. Results indicated that a teacher's qualifications for facilitating classroom interaction lie in the use of a variety of grouping patterns, spontaneous use of higher level questions, and facilitative responding rather than correcting or praising comments.

National Education Association, Project on Utilization of Inservice Education R & D Outcomes. The L.E.A.S.T. approach to classroom discipline. Description of inservice education materials, 1978. ERIC. ED 166 143.

The inservice topic discussed in this 78-page booklet is classroom management. The product title, L.E.A.S.T., is an acronym for the five steps toward classroom discipline: Leave things alone; End the action indirectly; Attend more fully; Spell out directions; and Track student progress.

Rosenshine, B. Teaching functions in instructional programs. Paper presented at the National Invitational Conference. "Research on Teachings: Implications for Practice", Warrenton, Va., 1982. ERIC. ED 221 538.

Successful experimental programs, in which teachers have been trained to increase their students' academic achievement, were analyzed to identify common teacher functions. Six recent studies in which teachers implemented training and in which students had higher achievement were examined. Conclusions drawn from the analysis include: 1) Students taught with structured curricula do better than those taught with individualized or discovery learning approaches; and 2) Students who received their instruction directly from the teacher achieved more than those expected to learn new material on their own or from each other. Specific teaching functions that promote learning included, 1) daily, weekly, monthly reviewing and reteaching if necessary, 2) high frequency of questions and overt student practice, and 3) giving feedback and correctives.

Rupley, W. H., et al. Identification of reading instructional practices employed by elementary teachers. Paper presented at the annual meeting of the National Reading Conference, Dallas, 1981. ERIC. ED 209 656.

A six-year-long study investigated the reading instructional strategies used by elementary school teachers (third and sixth grade) and identified those strategies used by effective and less effective teachers. The results showed that the more effective teachers at both grade levels used fewer reading groups, relied upon the basal reader diagnostic level tests, used progress as the criterion for changing students from one group to another, and relied heavily on the basal reader.

Stallings, J. A. Challenge teacher behaviour: A challenge for the 1980's. Paper presented at the annual meeting of the American Educational Research Association, Los Angeles, 1981. ERIC. ED 200 596.

A training program for changing teachers' classroom behaviours was developed after observation indicated that students gained in reading skills when teachers spent more time instructing, discussing homework, and providing supportive feedback. A post test of student reading achievement in classes where teachers had attended the workshops showed that the treatment group had higher grade gains than the control group.

Stallings, J. A., et al. How to change the process of teaching basic reading skills in secondary schools. Phase II and Phase III. Final Report, Revised Materials. Menlo Park, Calif.: SRI International, 1980. ERIC. ED 210 671.

This document contains revised materials for the second and third phases of a study designed to identify teaching processes that are efficient in helping secondary school students learn to read. The materials include an updated report of the effects of the teacher training workshops offered in the second phase of the study on teacher behaviour.

Peterson, D. and Peterson, K. A research based approach to teacher evaluation. NASSP Bulletin, February 1984.

Items such as instruments, methods of observation, context of evaluation, appraisal personnel and levels of evaluation are discussed. Research notes the necessity of evaluators being trained to increase measurement accuracy. "Training is the key to a successful application of a well-defined evaluation system" (44).

Tuckman, B. W., Steber, J. M., and Hyman, R. T. Judging the effectiveness of teaching styles: The perceptions of principals. Educational Administration Quarterly.

In 1967, Kerlinger, et al. stated that raters assessed traits of teacher effectiveness from their own judgments. Tuckman's study essentially draws a similar conclusion. Elementary, junior high, and high school principals were asked to rate 10 randomly selected staff members according to four dimensions: creativity, dynamism, organized demeanor, and warmth and acceptance (using the Tuckman Teacher Feedback Form). Results confirmed that principals at different grade levels valued different teacher characteristics. For example, high school principals valued the quality of dynamism more than administrators of the other two levels. The authors stress the importance of the principal making staff members aware of these preferences.

D. Follow-up

1. Analysis and Interpretation of Data

Brown, R. D. Helpful and humane teacher evaluations. In W. R. Duckett (Ed.), Teacher evaluation: Gathering and using data. Bloomington, Indiana: A CEDR Monograph, Phi Delta Kappa, 1983.

Brown presents many facets of the evaluation process. Regarding analysis and interpretation, he emphasizes the importance of due process. The author suggests getting "participants involved in trying to determine the meaning and significance of the information" gathered (18). The evaluator and teacher should "think together about possible causes, solutions, and resources" (18). A teacher who is involved in searching out solutions will be more amenable to change.

Centra, J. A. Determining faculty effectiveness. San Francisco: Jossey-Bass Pub., 1979.

The final chapter in Centra's book on teaching effectiveness contains information regarding decisions to be made after the data have been collected. The importance of establishing standards and comparing a teaching performance to that predetermined standard is emphasized. A system, claims Centra, should not depend solely on quantitative data but on qualitative data as well.

2. Conferencing

Acheson, K. H. and Gall, M. D. Techniques in the clinical supervision of teachers. Preservice and inservice applications. New York: Longman, Inc., 1980.

Chapter 4: The Feedback Conference offers an indepth illustration of the practice before and during the post-observation conference. The authors believe the conference should be based on a collection of objective observational data and should encourage the teacher to use insight gained from the appraisal to practise alternative teaching behaviors. Supervisors must encourage teachers to come to their own conclusions regarding possible changes in behavior based upon the data gathered.

Bolton, R. People skills: How to assert yourself, listen to others, and resolve conflicts. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1979.

A guide for improving conference skills in both routine and difficult situations.

Hawley, R. C. Evaluating teaching: A handbook of positive approaches. Amherst, Massachusetts: Education Research Associates, 1980 (4th ed.).

In 1976, Hawley developed and published a manual on evaluating teaching performance. In this, he lists the guidelines for structuring feedback to teachers. Some of these items include: 1) feedback should not overload the receiver with more information than she/he can handle at one time, 2) feedback should give information that is new to the teacher, and 3) feedback should report what happened, not why it happened.

Hunter, M. Six types of conferences. Educational Leadership, February 1980.

Hunter claims that until recently instructional conferences between supervisors and teachers were often sterile. Information was superficial or unclear -- no real purpose existed, no outcomes emerged. Hunter offers information and examples of six types of conferences. Each has a distinct purpose depending upon the predetermined need of the evaluation and the character of the teacher involved.

3. Report Writing

Capie, W., et al. Teacher performance assessment instruments. Athens, Georgia, School of Education, 1979. ERIC. ED 182 518.

The Teacher Performance Assessment Instruments (GPAI) designed to determine (for certification purposes) how well teachers can demonstrate certain minimum teaching skills considered essential to effective teaching are reproduced in this document. The five evaluating instruments used are: (1) teaching plans and materials; (2) classroom procedures; (3) interpersonal skills; (4) professional standards; and (5) student perceptions. Each instrument is prefaced by a description of its purpose and conditions for use. Procedures for processing and reporting data derived from an assessment are included.

Carey, W. C. Redesigning your teacher evaluation system. A guide for the evaluation committee. Salem, Oregon; Options Press, 1983.

This book explores a variety of questions and issues that relate both to the problems faced by the evaluator and the person whose performance is being assessed. Chapter headings include: The Classroom Observation; Evaluation Conferences, Evaluating the Education System; District Reporting and Training and Orientation.

Du Vall, L. A. An administrator views teacher evaluation. In W. R. Duckett (Ed.), Teacher evaluation: Gathering and using data. CEDR Monograph, Phi Delta Kappa, 1983.

Reporting formats, claims Du Vall, are determined by the needs of the people who will use this information. For example, if the purpose of the evaluation is the improve-

ment of instruction, then face-to-face reporting of evaluative information to the staff member is crucial. A somewhat different format may be acceptable if the objective is to re-examine the teacher's performance for tenure purposes.

Evertson, C. M., et al. Report of the methodology, rationale, and instrumentation of the junior high classroom organization study. RTD Report No. 6100. Austin: Texas University Research and Development Center for Teacher Education, 1980. ERIC. ED 189 076.

This report/contains a complete record of the methodology and instrumentation of the Junior High School Organization Study. The purpose of the study was to delineate specific effective teacher behaviours. Included in this report are a description of the selection and training of observers, and guidelines for writing narrative descriptions, coding observations, rating student engagement time, and noting time intervals on the narrative record. Sample forms for these procedures are presented. Samples are also given of data collection instruments used throughout the year-long observation period, including questionnaires sent to participating teachers, resulting feedback to teachers, and data analysis instruments.

Hawley, R. C. Assessing teacher performance. Amherst, Mass.: Education Research Associates, 1982.

The tasks involved in teacher evaluation are analyzed, and evaluation activities such as observing, holding conferences, supervising, and writing reports are described.

AUDIO-VISUAL AND INSERVICE MATERIALS

Communicating Non-Defensively: Don't Take it Personally.

1 film (): 1982.

This film is designed to aid both the giver and receiver of criticism in understanding the other person's position to avoid "taking it personally". A series of vignettes illustrate examples of defensive behavior and the consequences of defensive communication for individuals and organizations. Clear and positive steps are provided to ease defensive behavior and achieve non-defensive communication to increase morale and organizational productivity. The film is suited to enhancing relationships with both subordinates and superiors. Available: Library Services.

The DTD (Documenting Teacher Dismissal) Inservice Guide

By W. C. Carey. Available: Salem, Oregon: Options Press, 1982.

Documenting Teacher Dismissal

By W. C. Carey. The expressed purpose of this book is to develop evaluation materials that are defensible and supportive during the dismissal process. It is designed to be used 1) as a self-study guide, 2) in small study groups, or 3) as a basis of a formal workshop. Available: Salem, Oregon: Options Press, 1981.

Effective Teaching for Higher Achievement

2 videotapes, (each 50 min.) Beta or VHS, leader's guide: 1984.

Part I, Academic Learning Time, gives the main characteristics of effective teaching and components of academic learning time. Researchers explain how the research was conducted and suggest peer observation for feedback on use of time. Part 2, Organizing the Classroom, gives an explanation of academic learning time and portrays preventive techniques of effective teachers. Part 3, Influencing Student Behavior, discusses "low profile" interventions that conserve instructional time, the effective use of praise, recent research on behavior modification, and classroom incentive systems. Part 4, Teacher Expectations, explains how expectations influence teacher behavior and offers techniques to increase participation by all students. Part 5, Daily Review, Presentation, Guided Practice, presents the first three of Barak Rosenshine's six functions of effective teaching. Part 6, Feedback, Independent Practice, Periodic Reviews, presents Rosenshine's other three functions. Available: ASCD.

Essentially Yours: Evaluation

1 video cassette (16 min.), (Essentially yours series): 1972.

Reflects three major ambitions: to develop an effective means of communicating to the classroom teacher the essence of planning instruction for students, to experiment with a system on ways of supporting the continuing education needs of teachers and to change, while improvising. Available: Library Services.

Evaluating and Improving Teaching Performance

This set of 30 videotapes has been produced by Dr. Laurie Mireau for Alberta Education as part of an administrator training package entitled Evaluating and Improving Teaching Performance. The tapes are intended to be used in conjunction with a printed text, preferably in a group in-service setting. Basic information and classroom examples are presented in some of the tapes while other tapes of classroom instruction are to be used for coding practice by administrators who are fine-tuning their classroom observation and evaluation skills.

Titles of training tapes:

CHAPTER ONE, TAPE NO. 1-1 Accession Number: _____

INTRODUCTORY TAPE

Dr. Laurie Mireau reviews some promising classroom research trends which have yielded promising directions for supervisors of instruction. The role of the supervisor, particularly as a classroom observer, is considered in detail. Characteristics of the effective classroom observer and some "Do's and Don't's" of observation and conferencing are also presented.

CHAPTER ONE, TAPE NO. 1-2 Accession Number: _____

TEST TAPE

Before working through the activities in the entire kit, administrators are requested to view this 15-minute segment of classroom teaching and to prepare a set of formal statements about what was observed. This exercise is to be repeated after working through the kit. Heather Lynn, a Grade 2-3 teacher, demonstrates language arts activities.

CHAPTER ONE, TAPE NO. 1-3 Accession Number: _____

THE B CONFERENCE

Elizabeth Harrison, a Teacher Effectiveness Consultant, and Heather Lynn, Grade 2-3 teacher, model both an A Conference (reinforcing the teacher on the effective use of a particular skill) and a B Conference (generating alternatives together for the use of the same skill in a future lesson).

CHAPTER ONE, TAPE NO. 1-4 Accession Number: _____

THE C CONFERENCE

Elizabeth Harrison, a Teacher Effectiveness Consultant, and Merv Tuplin, Junior High School teacher, model both an A Conference (in which the teacher is reinforced for the effective use of a particular skill) and a C Conference (in which the teacher requests assistance with the implementation of a different skill and they jointly develop ways of using this skill in a future lesson).

CHAPTER ONE, TAPE NO. 1-5 Accession Number: _____

CONFERENCING WITH A TEACHER IN DIFFICULTY

Peter Carstensen and Susan McKenzie, Instructional Processes Consultants, demonstrate approaches recommended for conferencing with teachers experiencing problems. At intervals they explain the rationale behind the particular procedures and counselling techniques they are using and they role-play several conferences occurring between a supervisor and a teacher.

CHAPTER TWO, TAPE NO. 2-1 Accession Number: _____

OBSERVING CLASSROOM MANAGEMENT SKILLS

Dr. Laurie Mireau examines the pertinent aspects of many classroom management skills and supplements each explanation with illustrative video clips taken from lessons taught in eleven public school classrooms.

CHAPTER TWO, TAPE NO. 2-2 Accession Number: _____

THE POWER STRUGGLE

Glen Haug, Teacher Effectiveness Consultant, demonstrates what to do and say when engaged in a power struggle with a student. Vignettes have been role-played with seven high school students and Glen debriefs the methods used at various points in the video tape.

CHAPTER THREE, TAPES NO. 3-1 AND 3-2 Accession Numbers: _____ and _____

OBSERVING INSTRUCTIONAL SKILLS

Dr. Laurie Mireau explains the main characteristics and rationale for the use of many classroom instructional skills. Each explanation is accompanied by several examples chosen from the videotaped lessons of eleven classroom teachers.

CHAPTER THREE, TAPES NO. 3-3 and 3-4 Accession Numbers: _____ and _____

STUDENT ENGAGED TIME A AND B

These two tapes each contain three segments of classroom teaching focusing on two students for approximately 15 minutes. The tapes afford the observer the opportunity of coding "student engaged time" and assessing the percentage of on-task behavior in a variety of classroom settings.

CHAPTER FOUR, TAPE NO. 4-1 Accession Number: _____

OBSERVING VERBAL INTERACTION SKILLS

Dr. Laurie Mireau highlights verbal skills used in questioning students and in reacting to their response efforts. Examples of these skills in use have been selected from the videotaped lessons of eleven classroom teachers in Edmonton Public Schools.

CHAPTER FIVE, TAPE NO. 5-1 Accession Number: _____

OBSERVING INTERPERSONAL SKILLS

Dr. Laurie Mireau briefly describes selected interpersonal skills and presents examples of these skills as demonstrated by the eleven teachers who were videotaped during classroom instruction.

Titles of demonstration tapes edited by L. Mireau:

CHAPTER FIVE, TAPE NO. 5-2 ACCESSION NUMBER: _____

TEACHER HANDLING OF CONTROVERSIAL ISSUES

One lesson is included in this tape showing how class discussions on controversial issues might be handled.

CHAPTER SIX, TAPE NO. 6-1 Accession Number: _____

GRADE 11 BIOLOGY

Peter Harris, Biology 20. Following a field trip to the Saskatchewan River bank, Peter provides his students with additional background information on pollution control measures used by the City to monitor the amount of pollution in the river.

CHAPTER SIX, TAPE NO. 6-2 Accession Number: _____

GRADE 11 MATHEMATICS

Marilyn Nicholas, Math 30. Marilyn presents the binomial theorem to her class and assists them in understanding the derivation of the formula and in using it to solve equations.

CHAPTER SIX, TAPE NO. 6-3 Accession Number: _____

GRADE 1

Faye Kay. Faye's students begin the day by working independently, under her close supervision, on several language arts tasks before participating in a lesson addressed to the whole class.

CHAPTER SIX, TAPE NO. 6-4 Accession Number: _____

GRADE 5-6

Jim Johnson. Jim begins the afternoon with a class discussion combining the topics of peer pressure and problem-solving after which the class moves on to a creative composition period.

CHAPTER SIX, TAPE NO. 6-5 Accession Number: _____

GRADE 12

Ted Thresher, Math 33. Ted reviews quiz questions on quadratic functions with the class and then moves on to teach the formal procedures to be used when solving equations using complex numbers.

CHAPTER SIX, TAPE NO. 6-6 Accession Number: _____

GRADE 10

Denise Tremblay, French 10. Denise reviews the verb conjugations of [^]être and avoir in a game and then teaches how to use these verbs to form the passé composé tense. The class is conducted in French.

CHAPTER SIX, TAPE NO. 6-7 Accession Number: _____

GRADE 8

Ric Rosborough, Science. Ric conducts an oral review of the concepts studied in the last science unit in preparation for the end of the year exam.

CHAPTER SIX, TAPE NO. 6-8 Accession Number: _____

GRADE 7 ART

Ron Wigglesworth, Art. Ron assists his students to sharpen their observation skills through a series of exercises. After a surprise visit by two "creatures" the class is asked to draw what they have been able to observe.

CHAPTER SIX, TAPE NO. 6-9 Accession Number: _____

GRADE 7 MATH

Merv Tuplin, Mathematics. Merv assists students in locating the variable in English story problems and in translating these problem statements into accurate mathematical equations.

CHAPTER SIX, TAPE NO. 6-10 Accession Number: _____

GRADE 2-3

Heather Lynn. Heather works with the Grade Two's to review the use of the long and the short hand in telling time and the students are given a worksheet to complete while Heather works with the Grade Three's on three-digit addition.

CHAPTER SIX, TAPE NO. 6-11 Accession Number: _____

GRADE ONE

Helen Mills. Helen reviews spelling words with the class and assists them in completing an exercise sheet using these words. Helen reads them an animal poem and the students then modify the poem by inserting their favorite animal instead.

FURTHER MATERIAL FOR EVALUATING AND IMPROVING TEACHING PERFORMANCE

Five additional videotapes are described in the following pages. They are designed to provide practice in the observing, recording and evaluating of skills which were addressed in the preceding set of videotapes. The editor provides an introduction and preview information at the beginning of each tape. A review of the skills observed is provided at the end. Otherwise, uninterrupted classroom instruction is portrayed in lessons lasting about 30 minutes.

Videotape Numbers and Contents

Videotape Number	Lesson	Grade Level	Subject	Counter	
				Footage	Time
1	A	Junior High School	Social Studies	000	000
	B	High School	Statistics	348	24:00
2	A	High School	French	000	000
	B	Grade 2/3	Language Arts	620	39:00
3	A	High School	Mathematics	000	000
	B	Junior High School	Calligraphy	400	19:30
	C	Junior High School	Mathematics	640	38:40
4	A	Junior High School	Art	000	000
	B	Grade 1	Mathematics	335	24:00
5	A	Grade 1	Math/L. Arts	000	000
	B	Grade 1	Language Arts	423	33:00

Purpose: To present eleven edited lessons for evaluators to practice identifying and/or recording observable teaching behaviors.

The practice kit consists of five videotapes of eleven edited lessons ranging from grade one through high school, along with an Instruction Booklet. These materials were developed by Alberta Education, Planning Services Branch, in conjunction with a four volume publication: Planning for an Evaluation of Teaching Performance, and the Initiation to Teaching Project. A training kit consisting of videotapes and text, to be used before the practice kit, is also available. The text, Planning for an Evaluation of Teaching Performance, Volumes I, II, III and IV, will be made available to every jurisdiction in the province.

The nineteen criteria upon which the kit is based are teaching behaviors that have shown through numerous empirical studies to correlate to student achievement. A more complete explanation of the criteria selected is to be found in Planning and Evaluation Performance, Volume I.

Each lesson in the kit is an edited version of an actual classroom situation. Care was taken to retain the continuity of the lesson as intended by the teacher. Before some lessons teachers and/or students were asked to role-play certain behaviors in order to present outcomes helpful to the user of the practice videotapes.

A brief introduction precedes each lesson and specifies observable behaviors that will be found in the teaching performance. Suggestions for use of the practice videotapes:

1. Teaching performance supervisors: Superintendents, principals, assistant principals and other formal evaluators, either individually or in groups, may employ the practice kit:
 - to identify specific teacher behaviors that contribute to effective teaching
 - to record teacher performance on locally developed, or otherwise obtained, instruments
 - to improve recorder reliability by practising and then comparing data collected in small groups
 - to assist in selecting or developing instrumentation
 - to determine the usefulness and type of information an instrument offers
 - to discover possible personal biases and assumptions about effective teaching behaviors
2. Teacher self-evaluation: Individual teachers may find the practice tapes useful in appraising their own teaching performance for the following purposes:
 - to identify specific effective teaching behaviors
 - to analyse personal performance in relation to the effective teaching behaviors presented in each lesson
 - to assess the impact of skills presently in use
 - to assist in detecting and solving problem teaching patterns
 - to stimulate variations in teaching behaviors
 - to assist in the peer evaluation process

Titles of demonstration tapes edited by L. Elliott.

Tape 1: 48:00 minutes

Accession Number: _____

Lesson 1A: Junior High School - Social Studies

000 feet
0:00 timer

**Clarity of Instruction
Plans, Organization and Implementation
Classroom Management
Pace of Instruction
Enthusiasm**

A student role plays during part of this lesson on Russian history to show some helpful classroom management strategies used by the teacher, such as, low key verbal techniques and direct discipline. Ron approaches the student on several occasions asking him to behave appropriately. When the disruptive behavior occurs for the fourth time, Ron asks Mike to leave the room to return only when he is ready to behave as accepted by the teacher. Ron uses a variety of teaching aids such as the trough, sponges and the ship which indicate lesson planning and organization of materials were present. The lesson objectives, review and new material are clearly delivered by the teacher to facilitate student understanding of goals and objectives. After lecturing on Peter the Great, Ron asks pupils to make their own notes which acts as a check for the teacher regarding his instructional pace and also assists in making students accountable for the material presented.

Accession Number: _____

Lesson 1B: High School - Statistics

348 feet
24:00 timer

**Clarity of Instruction
Academic Learning Time
Pace of Instruction
Praise and Encouragement/Criticism
Task Oriented/Businesslike Orientation**

This lesson on the use of Z-scores is delivered in a businesslike, direct manner. Marilyn offers praise and encouragement to individual students as she monitors seatwork. Clear delivery of lesson content through the use of examples and board work, as well as assigning related questions maximize academic learning time.

Tape 2: 58:00 minutes

Accession Number: _____

Lesson 2A: High School French

**000 feet
0:00timer**

**Questioning Techniques
Classroom Management
Enthusiasm
Academic Learning Time
Teacher's Awareness
Feedback to Pupils**

This high school French lesson on the verb tense "passé composé" offers numerous effective teaching behaviors. Denise employs low key classroom management strategies as she calls upon students to respond to her questions. Her continuous and enthusiastic verbal feedback to pupils assists in maintaining their attention and thus teacher control. Denise's movement around the U-shaped seating arrangement facilitates her awareness of student behavior.

Accession Number: _____

Lesson 2B: Grades 2/3 - Language Arts

**620 feet
39:00 timer**

**Clarity of Instruction
Concurrent Tasks Management
Individualization of Instruction
Classroom Management
Enthusiasm**

This teacher begins by clearly introducing the upcoming events of the morning, and then specifies the objectives of this particular lesson. Heather employs a variety of low key classroom management strategies such as eye contact, hand gestures, touching, and calling out names of inattentive students to focus pupils' attention back on task. She displays concurrent tasks management as she corrects students' spelling and monitors classroom behavior in this split grade 2/3 class.

Tape 3: 59:30 minutes

Accession Number: _____

Lesson 3A: High School - Mathematics

000 feet
0:00 timer

**Clarity of Instruction
Teacher's Expectations
Academic Learning Time
Teacher Centered/Direct Instruction
Praise and Encouragement/Criticism**

Numerous effective teaching strategies are employed by this high school mathematics teacher. Ted uses direct instruction to clearly outline the unit objectives and lesson objectives and to review past work. He reviews and teaches new material by calling upon students to respond to questions from the board. Lecture, questioning and seatwork provide academic learning time for student understanding of course material. The teacher praises and encourages students as he moves around the classroom and at one point criticizes a student's work and compares those efforts to another student's - reinforcing the high expectations he has for student work.

Accession Number: _____

Lesson 3B: Junior High - Calligraphy

400 feet
19:30 timer

**Teacher Expectations
Classroom Management
Individualization of Instruction
Feedback to Pupils
Questioning Techniques**

A brief reading period precedes the calligraphy class on this videotape. The low key classroom management strategy of teaching rules, routines and procedures appears to be in effect as this lesson progresses. Pupils know that they will be asked to recall announcements; they know the day begins with a reading period during which some students will be asked to give a summary of their book. The teacher's expectations are relayed to the students in the calligraphy class during the introduction of lesson objectives and again while he assists individual students as they complete their letters. Merv employs questioning techniques with pauses to handle the review.

Lesson 3C: Junior High - Mathematics

Accession Number: _____

640 feet
38:40 timer

Classroom Management
Task Oriented/Businesslike Orientation
Pace of Instruction
Questioning Techniques
Praise and Encouragement/Criticism
Time-on-Task

The teacher greets students at the door which is a classroom management strategy that can defuse problem behavior and make students feel welcome. Merv uses a quiz at the beginning of this lesson to review past material. Correcting homework also acts as a review. Examples of assisting students to correctly answer homework questions are displayed. Students are allowed time to complete tasks assigned.

Tape 4: 59:34 minutes

Accession Number: _____

Lesson 4A: Junior High - Art

000 feet
0:00 timer

**Plans, Organization and Implementation
Praise and Encouragement/Criticism
Individualization of Instruction
Variability of Instruction
Enthusiasm**

This teacher has planned and organized this lesson as evident in his introduction of new material and lesson objectives. Ron uses praise, encouragement and criticism on an individual basis to direct student behaviors and outcomes.

Accession Number: _____

Lesson 4B: Grade 1 - Mathematics

335 feet
24:00 timer

**Questioning Techniques
Plans, Organization and Implementation
Praise and Encouragement/Criticism
Enthusiasm
Variability of Instruction**

This instructor reviews past material using questioning techniques and offers praise and encouragement to respondents. Faye varies instruction throughout this math lesson by progressing from questions, to boardwork, to reinforcing games and finally to worksheets. As students complete seatwork, she monitors their understanding of material on an individual basis. The math games played during part of the lesson are an indication of teacher pre-class organization and in-class implementation of plans.

Tape 5: 55:00 minutes

Accession Number: _____

Lesson 5A: Grade 1 - Mathematics, Language Arts

000 feet
0:00 timer

Individualization of Instruction
Praise and Encouragement/Criticism
Classroom Management
Concurrent Tasks Management
Teacher's Awareness

This teacher uses a game to review the numbers from 0 to 100 in her grade one math class. Students are then given time to practice using worksheets while the teacher gives individual assistance as she monitors seatwork. Helen uses riddles to encourage a smooth and quick transition from math to language arts. Low key, non-verbal classroom management strategies occur as Helen uses eye contact, gestures, facial expressions and moves closer to disruptive students in order to return them to on task behavior. Direct discipline is also evident as a classroom management technique. The teacher's awareness of distracting behavior allows her to stop major disruptions before they occur. The fact that Helen monitors student behavior, continues with the lesson, and completes board work shows concurrent tasks management.

Accession Number: _____

Lesson 5B: Grade 1 - Language Arts

423 feet
33:00 timer

Classroom Management
Concurrent Tasks Management
Individualization of Instruction
Academic Learning Time
Time-on-Task

Concurrent tasks management could be the focus of this teacher's performance. Faye seems to be doing five activities at once as some students request assistance about the topic and others require monitoring. Low key classroom management techniques are employed by this teacher to ensure students are on task. Faye offers individual assistance to students as they write their stories about a time when someone said "no" to them.

For more detailed descriptions of the above tapes, the reader is directed to L. Mireau's instructional guide, Evaluating and Improving Teaching Performance, as well as the Manual produced by Alberta Education which complements this Inservice Kit entitled, Planning for an Evaluation of Teaching Performance.

Evaluating Teacher Performance, Parts I and II

2 video tapes (each 60 min.) Beta or VHS, leader's guide, instructions and handouts for Part I.: 1981.

In Part I, (The Process) Richard Manatt explains a valid, reliable, and legal way to assess teacher performance using generic instruments (included) for lesson and performance analysis. He leads viewers through the process of evaluating four real elementary and secondary teaching episodes, providing opportunities for evaluators to check their own rater reliability against norms sampled from other supervisors and principals across the U. S. and Canada.

Part II (Teaching Episodes) consists of three more teaching episodes plus longer versions of two segments from Part I - a total of five real (not dramatized) samples of classroom teaching. They are third grade reading, secondary industrial arts, sixth grade social studies, first grade reading, and second grade art.

Participants can practice the skills taught in Part I by evaluating these episodes with instruments currently in use in their own school systems. Available ASCD.

Managing Your Teacher Evaluation System

A video - supported workshop by W. C. Carey. Available: Salem, Oregon: Options Press, 1982.

The Principal as Instructional Leader: Reflections on Effectiveness.

1 videotape (60 min.) Beta or VHS, leader's guide: 198?

This tape examines the behavior patterns of four principals -- elementary, middle, and high school -- to illustrate typical characteristics of principals of effective schools.

Principals are portrayed through the eyes of teachers and other school staff as they reflect on how the principal's actions affect their own desire and ability to teach. Based on recent studies, researchers confirm and amplify the teachers' and principals' comments. Available: ASCD.

Strategies of Effective Teaching

8 videotapes (30 min.) 1 videotape (60 min.), VHS, teacher's guide: 1978.

Lessons seen in the series deal with every major subject area in classes from K-6. Titles in this series are:

- 1) Overview: Teaching Operations and Associated Strategies
- 2) Attention, Curiosity, Motivation
- 3) Increasing Student Participation
- 4) Questioning Techniques and Policy
- 5) Integration of Teaching Strategies
- 6) Individual Teaching Styles
- 7) Applied Observation and Analysis
- 8) Application to the Classroom.

At the beginning of each half-hour program, Dr. Orme, (professor, researcher, and creator of Strategies of Effective Teaching) gives background information or defines a basic strategy. Viewers then watch real teachers using the strategy in unrehearsed, unscripted lessons. The one hour program presents five uninterrupted lessons, kindergarten through grade five, taught by teachers who appear in earlier programs. Dr. Orme then discusses ways for viewers to analyze the lessons. Available: AIT Collection.

The Supervisory Process: Helping Teachers to Improve Instruction

1 videotape (30 min.), Beta or VHS, leader's guide: n.d.

Procedures and practices shown in this videotape grow out of theoretical work in the areas of motivation, leadership, organization and communication. The process most closely parallels the clinical supervision model.

In the program, a typical teacher and supervisor simulate the five stages of the clinical supervision model: the pre-observation conference, observation, analysis and strategy, post-observation conference, and post-conference analysis. The supervisor serves as an observer for the teacher, and the process is used to help the teacher identify specific instructional patterns in the classroom. Through self-evaluation and suggestions made by the supervisor, the teacher recognizes the need to vary, enhance, or modify future lessons. Available: ASCD.

Supervising the Marginal Teacher

1 videotape (60 min.) Beta or VHS, leader's guide, booklet of instructional materials for handouts: 1984.

With vignettes of incompetent and improved teaching, classroom observation, conferencing with the teacher, and conferring with the school attorney, "Supervising the Marginal Teacher" spells out the supervisor's options:

- o intensive assistance - a systems approach to increasing teacher effectiveness
- o progressive discipline - supervisory strategies for managing the teacher whose conduct deviates from established policy
- o teacher dismissal. Available: ASCD.

INFORMATION RE: AUDIO-VISUAL MATERIALS

ACCESS Network. Dubbing Centre, 295 Midpark Way South East, Calgary, Alberta, T2N 4J8. (256-1100)

Agency for Instructional Television (AIT Collection). Box A, Bloomington, Indiana, 47402

All series in the AIT Collection are available in more than one video format. In addition, some series are available for purchase on 16mm film. Most can be rented by instructional broadcast services for reception in classrooms. All may be recorded by schools to play back at their convenience. Programs are available for preview, purchase and rental. For information, contact publisher.

Association for Supervision and Curriculum Development (ASCD). Department 1184, 225 N. Washington Street, Alexandria, VA 22314

Each videotape may be rented for a five-day period. If you decide to buy the program, the rental fee will be credited to the purchase price. When ordering, please give a preferred and an alternate date for showing. The rental fee is \$50.00 for five days. A catalogue entitled, "Media for Staff Development" is available from the publisher. As well, check with Library Services.

Library Services. 11160 Jasper Avenue., 4th Floor West, Edmonton, Alberta, T5K 0L2

Library Services provides lending and dubbing services to the Department and to Alberta Schools without charge. Videotapes may be dubbed on 1/2-inch or 3/4-inch VHS-type cassette. Kits and 16mm films may be requested on a Materials Request Form or by telephone. These forms may be obtained by telephoning or by writing to the above address. Distribution of materials is restricted to Alberta Education personnel, including Regional Offices, superintendents, local school board office personnel and IMC directors, principals and teachers, ATA Specialist Council personnel, University Faculty of Education personnel, community colleges, other Advanced Education institutions offering teacher-aide programs, and all Early Childhood educators who come under the jurisdiction of Alberta Education.

University of Alberta. Instructional Technology Centre, Edmonton, Alberta. T6G 2E1

The University offers only dubbing services. A blank cassette may be sent or one may be provided by the University. There is a cost for this service. For more information contact Patricia D. Pasos, Departmental Secretary at the above address.

Marlin Motion Pictures Ltd. Suite 200, 211 Watline Avenue, Mississauga, Ontario, L4Z 1P3

Marlin Motion Pictures Ltd. Suite 1212, 666 St. James Street, Winnipeg, Manitoba R3G 3J6

Mondays, Marbles and Chalk is available for short-term rental or long-term lease. For more information contact Mavis Swiston at 890-1500.

References

EVALUATION PROCEDURES

- Abramson, P. When teachers evaluate each other. Scholastic Magazine, September 1972.
- Acheson, K. H. and Gall, M. D. Techniques in the clinical supervision of teachers. Preservice and inservice application. New York: Longman, Inc., 1980.
- Alberta Teachers' Association. A Cooperative assessment: A manual for teachers. ATA. June 1979.
- Aleamoni, L. M. Typical faculty concerns about student evaluation of instruction. NACTA Journal, 16-21, March 1976.
- Alfonso, J. Will peer supervision work? Educational Leadership, 34(8), May 1977.
- Allen, K. H. and Jarvis, M. E. Analyzing teacher evaluation policies and procedures with case law. Paper presented at the annual meeting of the American Educational Research Association, Quebec, Canada, 1983. ERIC. ED 239 407.
- Allen, S. Accountability revisited. Education Canada, Winter 1980.
- Anderson, G. J. The assessment of learning environments: A manual for the Learning Environment Inventory and the My Class Inventory, 2nd. Ed. Halifax, Nova Scotia: Atlantic Institute of Education, 1973.
- Anderson, R. H. Improving your supervision skills. National Elementary Principal, June 1979.
- Andrews, J. W., Blackman, C. R., and Mackey, J. A. Preservice performance and the national teacher exams. Phi Delta Kappan, January 1980.
- Bailey, G. D. An evaluator's guide to diagnosing and analyzing teaching styles. NASSP Bulletin, February 1984.
- Bailey, G. D. Teacher self-assessment: A means for improving classroom instruction. Analysis and Action Series. Washington, D. C.: National Education Association, 1981.

- Bailey, G. D. Teacher self-assessment: In search of a philosophical foundation. National Association of Secondary School Principals, 62: 64-70, 1978.
- Barnes, S. Synthesis of selected research on teacher findings. Report No. 9009. Austin: Texas Univ. Research and Development Center for Teacher Education, 1981. ERIC ED 223 569.
- Beach, D. M. and Reinhartz, J. What is good teaching? - Using criteria of effective teaching to judge teacher performance. NASSP Bulletin, 68(475): 31-37, 1984.
- Beach, D. M. and Reinhartz, J. Improving instructional effectiveness: A self-assessment procedure. Illinois School Research and Development Journal, Fall 1982.
- Beckham, J. Legal aspects of teacher evaluation. Topeka, Kansas: National Organization on Legal Problems of Education, 1981.
- Beckham, J. C. Guide to teacher evaluation. The Trustee, 52(2): 11-12, Summer 1982.
- Bird, T. and Little, J. W. Finding and founding peer coaching. Paper presented at the Annual Meeting of the American Educational Research Association. Montreal, April 11-15, 1983.
- Blacker, D. A. Focus: Improvement of instruction. The Trustee, 52(2): 3-6, Summer 1982.
- Blake, R. H. Assessment of inquiry competencies in a performance-based teacher education program. Paper presented at the annual meeting of the Northern Rocky Mountain Educational Research Association, Jackson Hole, WY., 1983. ERIC. ED 241 555.
- Blecke, A. E. Encouraging teacher support for teacher evaluations. NASSP Bulletin, 66(458): 16-21, 1983.
- Blumberg, A. Supervisors and teachers: A private cold war. Berkeley, California: McCutchan Publishing Corporation, 1974.
- Bolton, R. People skills: How to assert yourself, listen to others, and resolve conflicts. Englewood, Cliffs, N.J.: Prentice-Hall, Inc., 1979.

- Borich, G. D., et al. Convergent and discriminant validity of five classroom observation systems: Testing a model. Journal of Educational Psychology, 70(2): 119-28, Apr. 1978.
- Borich, G. D. and Madden, S. K. Evaluating classroom instruction: A sourcebook of instruments. Menlo Park, CA.: Addison - Wesley, 1977.
- Boyer, E. G., Simon, A. and Karafin, G. (Eds). Measures of maturation. An anthology of early childhood observation instruments, (3 Volumes). Philadelphia, PA: Research for Better Schools, Inc., 1973.
- Braskamp, L. A., et al. Student ratings and instructor self-ratings and their relationship to student achievement. American Educational Research Journal, 16: 295-306, 1979.
- Bridges, E. M. Improving instruction and Education: Managing the less competent teacher. IFG Policy Perspectives, 1-4, Winter 1984.
- Brophy, J. E. Successful teaching strategies for the inner-city child. Phi Delta Kappan, 63(8): 527-30, Apr. 1982.
- Brophy, J. and Evertson, C. Low inference observational coding measures and teacher effectiveness, 1973. ERIC ED 077 879.
- Brophy, J. E., and Good, T. L. Teacher behavior and student achievement. In M. Wittrock (Ed.), Handbook of research on teaching (3rd. Ed.). New York: Macmillan, 1985.
- Brown, R. D. Helpful and humane teacher evaluation. In W. R. Duckett (Ed.), Teacher evaluation: Gathering and using data. Bloomington, Indiana: Phi Delta Kappa Center on Evaluation, Development and Research, 1983.
- Cangelosi, J. S. Evaluating teaching: A suggestion for principals. NASSP Bulletin, 68(475): 19-23, 1984.
- Cangelosi, J. S. Measurement and evaluation: An inductive approach for teachers. Dubuque, Iowa: W. C. Brown Co., 1982.
- Capie, W., et al. Teacher performance assessment instruments. Athens, Georgia: University of Georgia, School of Education, 1979. ERIC ED 182 518.

- Carey, W. C. Tactful teacher evaluations. A guide for the site administrator. (Finding pleasant ways to say unpleasant things). Salem, Oregon: Options Press, 1983.
- Carey, W. C. Redesigning your teacher evaluation system. A guide for the evaluation committee. Salem, Oregon: Options Press, 1983.
- Carey, W. C. Managing your teacher evaluation system (A video-supported workshop). Salem, Oregon: Options Press, 1982.
- Carey, W. C. The DTD (Documenting teacher dismissal) in-service guide. Salem, Oregon: Options Press, 1982.
- CEDR. Center on Evaluation, Development and Research. Evaluation of teaching: The formative process. Hot Topics Series. Bloomington, IN: Phi Delta Kappa, 1983-84.
- Centra, J. A. (Ed.). Determining faculty effectiveness. San Francisco: Jossey-Bass Publishers, 1980.
- Centra, J. A. (Ed.). Renewing and evaluating teaching. San Francisco: Jossey-Boss, 1977.
- Centra, J. A. and Creech, F. R. The relationship between student, teachers, course characteristics and student ratings for teacher effectiveness. Education Testing Service, Project report 76-1. Princeton, N.J., 1976.
- Cheong G. S. C. Student evaluations of instructors: Before and after the examination names vs. anonymous. Journal, 9(1), 1979.
- Chirnside, C. Ten Commandments for successful teacher evaluation. NASSP Bulletin, 68(475): 42-43, 1984.
- Cogan, M. Clinical supervision. Boston: Houghton - Mifflin, 1973.
- Cohen, P. Teacher evaluation in a school system: An overview. Education Canada, 19(3), Fall 1979.
- Cohen, P. A. Synthesizing research results on teacher evaluation using meta-analytic procedures. Paper presented at the annual meeting of the American Psychological Association, Washington, D.C., 1982. ERIC. ED 223 646.

- Conran, P.C. and Chase, A. Staff development for success. Illinois School Research and Development, 19(3): 24-29, Spring 1983.
- Cromack, T. R. and Egelston, R. L. Students as the source of information concerning teacher behavior: New concepts in the appraisal of instruction. The Journal of Classroom Interaction, Winter 1979.
- CTF Teacher evaluation. A CTF Conference Report, Canadian Teachers' Federation, Ottawa, Ontario. September 1982.
- Cuccia, N. J. Systematic observation formats: Key to improving communication in evaluation. NASSP Bulletin, February 1984.
- Darling-Hammond, L., Wise, A. H., et al. Teacher evaluation in the organizational context: A review of the literature. Review of Educational Research, 53(3), Fall 1983.
- Denham, A. Clinical supervision: What we need to know about its potential for improving instruction. Contemporary Education, 49: 33-37, 1977.
- Diamond, S. Micro-supervisory experience, humanistic and clinical format. NASSP Bulletin, March 1980.
- Duckett, W. R. (Ed.). Observation and the evaluation of teaching. Bloomington, In.: Phi Delta Kappa. A CEDR Monograph, 1980.
- Duckett, W. R. (Ed.). Planning for the evaluation of teaching. Bloomington, In.: Phi Delta Kappa. A CEDR Monograph, 1979.
- Duckett, W. R. (Ed.). Teacher evaluation: Gathering and using data. Bloomington, In.: Phi Delta Kappa. A CEDR Monograph, 1983.
- Du Vall, L. A. An administrator views teacher evaluation. In W. R. Duckett (Ed.), Teacher evaluation: Gathering and using data. CEDR Monograph, Phi Delta Kappa, 1983.
- Eash, M. J. and Waxman, H. C. Students' perceptions of effective teaching in different subject areas. Paper presented at the annual meeting of the American Educational Research Association, Boston, 1980. ERIC. ED 191 913.

- Eastridge, H. E. Student evaluations and teacher performance. National Association of Secondary School Principals Bulletin, 60: 48-54, 1976.
- Ellis, E. C., Smith, J. T., and Abbot Jr., W. H. Peer observation: A means for supervisory acceptance. Educational Leadership, 36(6), March 1979.
- Emans, R. Teaching behaviors in reading instruction: A review of the research and critique. Paper presented at the annual meeting of the American Association of Colleges for Teacher Education, Detroit, 1983. ERIC. ED 227 093.
- Emmer, E. T. Classroom observation scales, February 1973. ERIC. ED 076 573.
- Emmer, E. T., et al. The classroom management improvement study: An experiment in elementary school classrooms. Austin: Texas Univ. Research and Development Center for Teacher Education, 1981. ERIC. ED 226 452.
- Erickson, C. M. Education to help people grow. The Trustee, 52(2): 9-11, Summer 1982.
- Evertson, C. M., et al. Report of the methodology, rationale, and instrumentation of the junior high classroom organization study. R & D Report No. 6100. Austin: Texas Univ. Research and Development Center for Teacher Education, 1980. ERIC. ED 189 076.
- Evertson, C. M. and Anderson, L. M. Interim progress report: The classroom organization study. Correlates of effective teaching. Austin: Texas Univ. Research and Development Center for Teacher Education, 1978. ERIC. ED 167 525.
- Eye, G. G. Supervisory skills: The evaluation of the art. Journal of Educational Research, 69:14-19, 1975.
- Feldvebel, A. M. Teacher evaluation: Ingredients of a credible model. The Clearing-house, 53(9): 415-420, 1980.
- Fischer, N. A. Evaluating teachers: One principal's way. Principal, 61(5): 37-39, 1982.
- Flippo, R. F. and Foster, C. R. Teacher competency testing and its impact on educators. Journal of Teacher Education, 35(2), 1984.

- Fordham, A. The context of teaching and learning in studies of teacher effectiveness. Studies in Educational Evaluation, 8(2): 111-28, 1982.
- Foster, D. C. Selection of evaluation criteria for the development of a teacher assessment system. (Research report No. 84-1). Seattle, WA: Washington University Teacher Education Research Center, 1984. ERIC. ED 242 719.
- Fox, R., et al. Student evaluation of teacher as a measure of teacher behavior and teacher impact on students. Journal of Educational Research, 77(1), Sept/Oct. 1983.
- Fredrick, G. H. Supervision and evaluation - recognizing the difference can increase value, effectiveness. NASSP Bulletin, 68(475): 12-18, 1984.
- Fris, J. Teacher supervision in Burnaby, B. C. The Canadian School Executive, June 1983.
- Georgia Department of Education. Division of Staff Development. Teacher performance assessment instruments. Athens, Georgia: Teacher Assessment Project, College of Education, University of Georgia, 1979.
- Giflin, A., et al. Supervision, reflection and understanding: A case for horizontal evaluation. Journal of Teacher Education, 35(3), May-June 1984.
- Goldhammer, R., Anderson, R. H., and Krajewski, R. J. Clinical supervision: Special methods for the supervision of teachers. (2nd Ed.). New York: Holt, Rinehart and Winston, 1980.
- Goldsberry, L. Another perspective: A response to McFaul and Cooper. Journal of Teacher Education, 35(2), 1984.
- Goldsberry, L. The realities of clinical supervision. Educational Leadership, April 1984.
- Goldstein, W. Supervision made simple. (Fastback 1980). Bloomington, In: Phi Delta Kappa Educational Foundation, 1982. ERIC. ED 225 286.
- Good, T. L. Classroom observation: Potential and problems. In W. R. Duckett (Ed.), Observation and the evaluation of teaching. A CEDR Monograph, Phi Delta Kappa, 1981.

- Gray, F. When evaluating teachers, never violate these 13 rules. The Executive Educator, 18-38, November 1981.
- Grossnickle, D. R. and Cutter, T. W. It takes one to know one - Advocating colleagues as evaluators. NASSP Bulletin, February 1984.
- Guthrie, E. R. The evaluation of teaching: A progress report. Seattle: U. of Washington Press, 1954.
- Haefele, D. L. How to evaluate thee, teacher - Let me count the ways. Phi Delta Kappan, January 1980.
- Haertel, G. D., et al. Psychological models of educational performance. A theoretical synthesis of constructs. Review of Educational Research, 53(1): 75-91, Spring 1983.
- Harris, B. M. Supervisory behavior in education. (3rd. Ed.). Englewood Cliffs, N.J.: Prentice Hall, 1985.
- Hamachek, D. Characteristics of good teachers and implications for teacher education. Phi Delta Kappan, February 1969.
- Hawley, R. C. Assessing teacher performance. Amherst, Mass.: Education Research Associates, 1982.
- Hawley, R. C. Evaluating teaching: A handbook of positive approaches. (4th Ed.). Amherst, Mass: Educational Research Associates, 1980.
- Hawley, R. C. and Hawley, I. L. Achieving better classroom discipline. Amherst, Mass.: Education Research Associates, 1981.
- Heidelback, R. (Ed.). Developing supervisory practice. Washington, DC.: Association of Teacher Educators, 1978.
- Henderson, C. Musical accountability: The measurement of music teacher behaviors. Accentuating the positive, 1974. ERIC. ED 171 637.
- Hiebert, B. Counselor effectiveness: An instructional approach. The Personnel and Guidance Journal, 62(10), June 1984.

- Holdaway, E. A. Practices and policies involved in the formal evaluation of teachers in Alberta. Research Report. Dept. of Ed. Adm., University of Alberta, June 1977.
- Hopfengardner J. and Walker, R. Collegial support: An alternative to principal - led supervision of instruction. NASSP Bulletin, April 1984.
- Hosford, P. and Martin, J. Prospective teacher evaluation via videotape. Journal of the Association of Teacher Educators, II(1):45-48, Winter 1979-80.
- Huitt, W. G. and Segars, J. K. Characteristics of Effective Classrooms. Philadelphia, P.A.: Research for better schools, Inc., 1980. ERIC. ED 207 216.
- Hunter, M. Six types of conference. Educational Leadership, February 1980.
- Hyman, R. T. Testing for teacher competence: The logic, the law and the implications. Journal of Teacher Education, 35(2), 1984.
- Hyman, R. T. School administrator's handbook of teacher supervision and evaluation methods. Englewood Cliffs, N.J.: Prentice-Hall, 1975.
- Information collection. Time leader's guide. Basic skills instructional improvement program. Philadelphia, Pa.: Research for better schools, Inc., 1980. ERIC. ED 193 200.
- Ingle, R. B. Techniques for systematic observation. In W. Duckett (Ed.), Observation and the evaluation of teaching. A CEDR Monograph, Phi Delta Kappa, 1980.
- Iwanicki, E. F. and McEachern, L. Using teacher self-assessment to identify staff development needs. Journal of Teacher Education, 35(2), 1984.
- Iwanicki, E. F. and McEachern, L. Teacher self-improvement: A promising approach to professional development and school improvement. Journal of Staff development, 4(1): 62-77, 1983.
- Johnson, C. Teacher Performance Assessment Instruments (TPAI), 1982.
- Jones, V. An administrators guide to developing and evaluating a building discipline program. NASSP, April 1984.

- Joyce, B. R. Power in staff development through research on training. Alexandria, VA: Association for Supervision and Curriculum Development, 1983.
- Keeler, B. T. Teacher evaluations. ATA Magazine, 60(4): 30, 1980.
- King, R. A. Reliable rating sheets: A key to effective teacher evaluation. National Association of Secondary School Principals Bulletin, 62: 21-26, 1978.
- Kowalski, J. T. S. Evaluating teacher performance. Arlington, Va.: Educational Research Service, 1978.
- Krajewski, R. J. Clinical supervision: A conceptual framework. Journal of Research and Development in Education, 15(2), 38-43, 1982.
- Krajewski, R. J. Clinical supervision: To facilitate teacher self-improvement. Journal of Research and Development in Education, 9(2): 58-66, 1976.
- Kugle, C. L. Data collection procedures for the evaluation of teaching program, Phase II. Technical Report No. 5055. Austin: Texas Univ. Research and Development Center for Teacher education, 1978. ERIC. ED 170 340.
- Kugle, C. L. and Clements, R. O. One good look deserves another: Combining methodologies to describe classrooms. Report No. 5084. Austin: Texas Univ. Research and Development Center for Teacher Education, 1980. ERIC. ED 192 293.
- Kyle, Jr. W. C., et al. Science laboratory interaction categories (SLIC): An instrument to observe and analyze the various parameters of activity-centered and vocational education classrooms. Technical Report 15.
- Lamb, R. W. and Thomas, M. D. The art and science of teacher evaluation. Principal, 61(1), 45-48, 1981.
- Larson, R. Teacher performance evaluation -- What are the key elements? NASSP Bulletin, February 1984.
- Lerch, R. D. The clinical model: The optimum approach to supervision. Clearing-house, 53, January 1980.
- Levin, B. Students evaluating teachers. The Canadian School Executive, June 1983.

MacDonald, F. A report on the results of Phase II of the Beginning Teacher Evaluation Study: The effects of teaching performance on student learning. Paper presented to A.E.R.A., San Francisco, April 1976.

MacKay, D. A. and Osoba, E. C. New directions in teacher supervision. Centre for Research in Teaching, University of Alberta.

MacNaughton, R. H., et al. Effective teacher evaluation - process must be personalized, individualized. NASSP Bulletin, 68(475): 1-11, 1984.

Magoon, A. J. Sensitive field observation of teaching performance. Journal of Teacher Education, 30(2), Mar-April 1979.

Magsino, R. F. Competencies for teaching: Confronting the real priority in Canadian education. Canadian Journal of Education, 4(4), 1979.

Manatt, R. P., et al. Evaluating teacher performance with improved rating scales. NASSP Bulletin, 60(401): 21-24, 1976.

Mangano, N., Rupley, W., and Willson, V. External validity issues associated with classroom observational research. Journal of Classroom Interaction, 19(1).

Marsh, H. W., et al. Validity and usefulness of student evaluations of instructional quality. Journal of Educational Psychology, 67: 833-839, 1975.

McBean, E. A. and Al-Nassri, S. Questionnaire design for student measurement of teaching effectiveness. Higher Education II, 1982.

McConnell, J. W. and Bowers, N. D. A comparison of high-inference and low-inference measures of teacher behaviors as predictors of pupil attitudes and achievements. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979. ERIC. ED 171 780.

McCready, D. J. Student evaluation of teaching. Canadian Journal of Higher Education, VII(2), 1981.

McFaul S. and Cooper J. Peer clinical supervision: Theory vs. reality. Educational Leadership, April 1984.

McGee, J. C. and Eaker, R. Clinical supervision and teacher anxiety: A collegial approach to the problem. Contemporary Education, XLIX(1), Fall 1977.

- McGreal, T. L. Successful teacher evaluation. Alexandria, VA: Association for Supervision and Curriculum Development.
- McGreal, T. L. Developing a teacher evaluation system: Commonalities of these systems that function most effectively. Paper presented at the annual meeting of the Association for Supervision and Curriculum Development, Anaheim, Ca., 1982. ERIC. ED 226 418.
- McIntyre, D. J. A response to the critics of field experience supervision. Journal of Teacher Education, 35(3), May-June 1984.
- Medley, D. M. Teacher competency testing and the teacher educator. Published jointly by the Association of Teacher Educators and the Bureau of Educational Research, University of Virginia, 1982.
- Medley, D. M., Coker H., and Soar, R. S. Measurement-based evaluation of teacher performance. An empirical approach. New York: Longman, Inc., 1984.
- Medley, D., Soar, R., and Coker, H. The minimum conditions for valid evaluation of teacher performance. Journal of Classroom Interaction, 19(1): 22-27, Winter 1983.
- Meeham, M. L. Evaluation of the Stallings classroom management staff development demonstration project in Putnam County, West Virginia. Charleston, W.Va.: Appalachia Educational Lab., 1981. ERIC. ED 225 977.
- Miley, A. Procedures for classroom observations 1973-1974. Technical Report #19. Honolulu: Kamehameha Schools. Kamehameha Early Education Project, 1974. ERIC. ED 158 844.
- Millman, J. (Ed.). Handbook of teacher evaluation. Beverly Hills, California: Sage Publications, 1981.
- Mooney, J. P. A systems supervisory model for principals: Where are we? NASSP Bulletin, February 1984.
- Moore, T. J. and Neal, W. D. The evaluation of teaching performance. The Journal of Educational Administration, VII(2), October 1969.
- Munroe, M. J. Teaching behaviors effective in mainstream classrooms. Paper presented at the annual state conference of the Arizona Federation Council for Exceptional Children, Tucson, 1982. ERIC. ED 213 679.

- Nasca, D. and Davis, H. B. Verbal interaction behaviors of teachers of the gifted, 1981. ERIC. ED 216 478.
- National Association of Secondary School Principals. Teacher incentives: A strategy for effective educational management. Reston, Va.: NASSP, 1985.
- National Education Association, Project on Utilization of Inservice Education R & D Outcomes. The L.E.A.S.T. approach to classroom discipline. Description of inservice education materials, 1978. ERIC. ED 166 143.
- National Study of School Evaluation. A self-directed program for developing teacher and administrator evaluation procedures. Falls Church, VA: National Study of School Evaluation, 1984.
- Natriello, G. Teachers' perceptions of the frequency of evaluation and assessments of their effort and effectiveness. American Educational Research Journal, 21(3): 579-595, 1984.
- Natriello, G. Evaluation frequency, teacher influence and internalization of evaluation processes: A review of six studies using the theory of evaluation and authority. Final report. Eugene, OR: Oregon University, Center for Educational Policy and Management, 1983. ERIC. ED 242 050.
- Natriello, G. and Dornbusch, S. M. Pitfalls in the evaluation of teachers by principals. Administrator's Notebook, 29(6), 1980-1981, entire issue.
- Ness, M. The administrator as instructional supervisor. Educational Leadership, February 1980.
- Newberry, A. A principal's guide to planning supervision. The Canadian School Executive, 4(4): 7-10, October 1984.
- Noli, P. A principal implements BTES. Beginning Teacher Evaluation Study News Letter, November 1979.
- Noli, P. A principal implements an ALT program. Journal of Classroom Interaction, 17(2), November 1979.
- Norris, S. P. Defining observational competence. Science Education, 68(2), 1984.

- O'Hanlon, J. and Mortesen, L. Making teacher evaluation work. Journal of Higher Education, 51: 664-671, 1980.
- Oliva, P. F. and Henson, K. T. What are the essential generic teaching competencies? Theory into Practice, 19(2): 117-21, Spring 1980.
- Oliver, B. Desirable qualities in teacher performance appraisal systems. Teacher Education, 18(3): 26-30, Winter 1982.
- Pambookian, H. S. Discrepancy between instructor and student evaluations of instruction: Effect on instructor. Instructor Science, 5: 63-78, 1976.
- Pattavina, P. and Ramirez, R. Generic affective teaching competencies, and personal efficacy needs of Hispanic students in public schools. Paper presented at the Council for Exceptional Children Conference on the Exceptional Bilingual Child, New Orleans, 1981. ERIC. ED 207 291.
- Peterson, D. Legal and ethical issues of teacher evaluation: A research based approach. Educational Research Quarterly, 7(4): 6-16, 1983.
- Peterson, D. and Peterson, K. A research-based approach to teacher evaluation. NASSP Bulletin, February 1984.
- Peterson, K. Methodological problems in teacher evaluation. Journal of Research and Development in Education, 17(4): 62-70, 1984.
- Peterson, K. and Kauchak, D. Progress on development of lines of evidence for the evaluation of public school teaching. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada, 1983.
- Peterson, K. and Kauchak, D. Teacher evaluation: Perspectives, practices and promises. Salt Lake City: Center for Educational Practice, University of Utah, 1982.
- Pike, K. Have you disabled a student today. A look at teacher effectiveness. Paper presented at the annual meeting of the International Reading Association, Chicago, 1982. ERIC. ED 216 311.
- Pinola, M. Are you an "A" teacher? A short quiz for self evaluation. Education, 102(4), April 1982.

- Popham, W. J. Pitfalls and pratfalls of teacher evaluation. Educational Leadership, 141-46, November 1974.
- Powell, M. Variable teaching behaviors: The importance of considering context in understanding teaching. Educational Research Quarterly, 4(2): 36-42, Summer 1979.
- Prawat, R. S. and Solomon, D. J. Validation of a classroom climate inventory for use at the early elementary level. Education and Psychological Measurement, 41(2), Summer 1981.
- Ratsoy, E. W. and Sloan, L. V. Effective teaching as a focus for supervisory activity. Canadian Administrator, 20(7), April 1981.
- Reavis, C. A. A convincing case for clinical supervision. The Trustee, 50(1): 19-22, 1980.
- Reikie, M. J. Policies and practices used in preparing formal evaluations of teachers in Alberta. Master's thesis, Faculty of Education, University of Alberta, 1977.
- Richardson, D. C. and Hatley, R. V. The instrument for the observation of teaching activities (IOTA) and alternative approaches to remediation of teacher weaknesses. The Southern Journal of Educational Research, U. of Southern Mississippi.
- Riley, R. D. and Schaffer, E. C. Self-Certification: Accounting to oneself. Journal of Teacher Education, 30(2): 23-26, 1979.
- Rohrkemper, M. M. Teacher self-assessment. In D. L. Duke (Ed.), Helping teachers manage classrooms. Alexandria, Virginia: Association for Supervision and Curriculum Development, 1982.
- Rosenshine, B. Teaching functions in instructional programs. Paper presented at the National Invitational Conference. "Research on Teachings: Implications for Practice," Warrenton, Va., 1982. ERIC. ED 221 538.
- Rosenshine, B. V. and Furst N. Research on teacher performance criteria. In B. Smith, (Ed.), Research in teacher education: A symposium. Englewood Cliffs, New Jersey: Prentice Hall, 1979.

- Ross, V. J. Here's how teachers should be evaluated. The American School Board Journal, August, 25-27, 1981.
- Rothberg, R. A. Helping teachers improve their teaching. Clearinghouse, 53(2), October 1979.
- Rupley, W. H., et al. Identification of reading instructional practices employed by elementary teachers. Paper presented at the annual meeting of the National Reading Conference, Dallas, 1981. ERIC. ED 209 656.
- Sapone, C. V. Appraisal and evaluation systems: Perceptions of administrators, teachers. NASSP Bulletin, 65(442), February 1981.
- Seifert E. and Beck, J. Time-on-Task observations: How principals can improve instruction. NASSP Bulletin, April 1984.
- Sergiovanni, T. J. Professional supervision for professional teachers. Washington, D.C.: Association for Supervision and Curriculum Development, 1975. ERIC. ED 104 886.
- Sergiovanni, T. J. and Starrett, R. J. Supervision: Human perspectives (3rd Ed.) New York: McGraw-Hill, 1983.
- Sergiovanni, T. J. (Ed.). Supervision of teaching: Alexandria, Virginia: Association for Supervision and Curriculum Development, 1982.
- Shavelson, R. and Dempsey - Atwood, N. Generalizability of measures of teaching behavior. Review of Educational Research, 46(4), Fall 1976.
- Simon, A. and Boyer, E. G. (Eds.). Mirrors for behavior III: An anthology of observation instruments. Wyncote, PA.: Communication Materials Center, 1974.
- Simpson, R. H. Teacher self-evaluation. London: MacMillan, 1966.
- Sirotnik, K. A. An inter-observer reliability study of a modified SR1 observation system. Journal of Classroom Interaction, 19(1).
- Smith, G. P. The critical issue of excellence and equity in competency testing. Journal of Teacher Education, 35(2), 1984.

- Smyth, W. J. Principals role: Teacher evaluation: Rationale, procedures. NASSP Bulletin, Mar. 1980.
- Snyder, K. J. Clinical supervision in the 1980s. Educational Leadership, April 1981.
- Snyder, K. J. Imperatives in staff training, evaluation, and management. Paper presented at the annual meeting of the American Educational Research Association, Los Angeles, 1981. ERIC. ED 208 588.
- Soar, R. S., Medley, D. M., and Coker, H. Teacher evaluation: A critique of currently used methods. Phi Delta Kappan, 65(4), December 1983.
- Soar, R. S. and Soar, R. M. Setting variables, classroom interaction, and multiple pupil outcomes. Final Report. Gainesville: Florida Univ. Institute for Development of Human Resources, 1978. ERIC. ED 225 999.
- Squires, D. A. Effective schools and classrooms: A research based perspective. Alexandria, VA: Association for Supervision and Curriculum Development, 1983.
- Stallings, J. A. Changing teacher behavior: A challenge for the 1980's. Paper presented at the annual meeting of the American Educational Research Association, Los Angeles, 1981. ERIC. ED 200 596.
- Stallings, J. A., et al. How to change the process of teaching basic reading skills in secondary schools. Phase II and Phase III. Final Report, Revised Materials. Menlo Park, Calif.: SRI International, 1980. ERIC. ED 210 671.
- Stedman, C. H. Testing for competency: A pyrrhic victory? Journal of Teacher Education, 35(2), 1984.
- Stier Jr., W. F. Faculty evaluation: A positive approach, April 1982. ERIC. ED 223 119.
- Stodolsky, S. S. Teacher evaluation: The limits of looking. Educational Researcher, pp. 11-81, November 1984.
- Streich, W. H. The anthropological field method of classroom observation and teaching evaluation. ERIC. ED 243 196.

- Strike, K. A. and Millman, J. Nontechnical questions about teacher evaluation systems in elementary and secondary schools: A research agenda. Educational Evaluation and Policy Analysis, 5(4): 389-397, 1983.
- Sullivan, C. Supervisor expectations and work realities: The great gulf. Educational Leadership, 39, March 1982.
- Sullivan C. G. Clinical supervision. A state of the art review. Alexandria, Virginia: Association for Supervision and Curriculum Development, 1980.
- Sullivan, D. K., et al. Implementation of the Stallings classroom management staff development demonstration Project in Putnom County, West Virginia. Charleston, W. Va.: Appalachia Educational Lab., 1981. ERIC. ED 225 976.
- Sweeney, J. Assessing teachers as humanists and team players. The Trustee, 50(4): 12-13, 1980.
- Sweeney, J. and Manatt, D. A team approach to supervising the marginal teacher. Educational Leadership, April 1984.
- Texas Junior High School Study: Final Report of Process - Outcome Relationships: Classroom Observation Scales. Appendix B. Austin: Texas Univ. Research and Development Center for Teacher Education, 1978. ERIC. ED 173 746.
- Thies - Sprinthall, L. Promoting the developmental growth of supervising teachers: Theory, research programs, and implications. Journal of Teacher Education, 35(3), May-June 1984.
- Thompson, M. L. and Ellis, J. R. Persistent difficulties of teacher evaluation. Illinois School Research and Development, 17(3), Spring 1981.
- Tikunoff, W., Berliner, D., and Rist, R. An ethnographic study of the forty classrooms of the beginning teacher evaluation study known sample. Technical Report No. 75-10-5. San Francisco: Far West Laboratory for Educational Research and Development, 1975.
- Tollefson, N., Wigington, H., and McKnight, P. Course ratings as measures of instructional effectiveness. Instructional Science, 12, 1983.
- Townsend, D. Teacher evaluation in secondary schools. Edmonton, Alberta: Alberta Education, Planning Services, June 1984.

- Townsend, D. Teacher evaluation in secondary schools. Summary Report. Edmonton, Alberta: Alberta Education, Planning Services, June 1984.
- Tracey, W. R. Teacher evaluation - Another perspective. The Clearinghouse, 51: 240-242, 1978.
- Troisi, N. F. Effective teaching and student achievement. Reston, Va.: National Association of Secondary School Principals, 1983. ERIC. ED 231 067. Microfiche.
- Tuckmann, B. W., Steber, J. M., and Hyman, R. T. Judging the effectiveness of teaching styles: The perceptions of principals. A paper presented at the annual meeting of the American Educational Research Association. New York, 1977.
- Turnbull, G. and Ragsdale, R. G. The analysis of data for teacher performance evaluation, OISE, 1981. Microfiche, National Library, Ottawa.
- Tymko, J. L. Performance appraisal: At issue in the 80's. The Trustee, 50(4): 10-11, 1980.
- Ulrich, T. Tenure in the teaching profession. No protection for incompetents. Manitoba Teacher, 15-17, December 1984.
- Vogt, C. G. Developing a teacher evaluation system. Spectrum, 2(1): 41-46, 1984.
- Vukovich, D. and Pfeiffer, I. Self-concept and self-evaluation: What is the relationship? Journal of the Association of Teacher Educators, 11(1): 49-54, Winter 1979-80.
- Waimon, M. D., et al. Using product analysis to develop self-improvement skills in CBTE programs, 1979. ERIC. ED. 175 810.
- Walberg, J. (Ed.). Evaluating educational performance. Berkeley, California: McCutchan Publishing Corporation, 1974.
- Ward, B. A., et al. An expanded view of the student outcomes that are built or restrained by teaching processes and structures. San Francisco: Far West Lab. for Educational Research and Development, 1981. ERIC. ED 223 585.

- Waxman, H. C. Evaluating teachers by alternate distribution criteria. Education, 104(3): 305-310, 1984.
- Weinrott, M. R., et al. Convergent and discriminant validity of five classroom observation systems: A secondary analysis. Journal of Educational Psychology, 73(5): 671-80, Oct. 1981.
- Weinstein, C. S. and Woolfolk, A. E. Impression formation and classroom design: The impact of spatial arrangement and neatness on judgements of teachers. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979. ERIC. ED 172 177.
- Weller, L. D. Teacher performance assessment instruments: A "personalized" approach to staff development. The Teacher Educator, 18(2), Autumn 1982.
- Wise, A. E. and Darling-Hammond, L. Teacher evaluation and teacher professionalism. Educational Leadership, 42(4): 28-33, Dec.-Jan. 1984-85.
- Wise, A. E., et al. Teacher evaluation. A study of effective practices. Santa Monica, CA: Rand, 1984.
- Worksham, M. E. Student accountability for written work in junior high school classes. Austin: Texas Univ. Research and Development Center for Teacher Education, 1981. ERIC. ED 203 387.
- Worthen, R. and Sanders, J. R. Educational evaluation: Theory and practice. Blemont, California: Wadsworth Publishing Company, Inc., 1973.
- Zirkel, P. A. Teacher evaluation: A legal overview. The Journal of the Association of Teacher Educators, II(1): 17-26, Winter 1979-80.



Planning Services

Alberta
EDUCATION

**PLANNING FOR AN EVALUATION
OF TEACHING PERFORMANCE**

VOLUME IV

**Summaries Of Instruments For
Use in Evaluating Teaching Performance**

**Compiled by
I. Yuzdepski**

**With
L. Elliott**

Planning Services

Alberta Education

August, 1985

FOREWORD

Planning for an Evaluation of Teaching Performance comprises four separately bound volumes: A Manual of Guidelines, (Vol. I); Teacher Effectiveness: Annotated Bibliography and References, (Vol. II); Evaluation Procedures: Annotated Bibliography and References, (Vol. III); and Summaries of Instruments for Use in Evaluating Teaching Performance, (Vol. IV).

The content is delimited to gathering and interpreting information about teaching and learning in classroom settings. The main focus is on behaviors of teachers that research has shown to be consistently associated with academic learning by pupils. Some attention is also directed to several classroom behaviors of pupils often found to correlate with effective learning.

The contents of the publication are intended to be used as guidelines. Readers should feel free to reject, adapt or adopt the ideas communicated as local needs dictate. All school jurisdictions have policy and structures in place for evaluating teaching performance. Hence, selections from these volumes might be identified and used in reviewing local policies, guidelines and procedures.

The companion publication, Evaluating and Improving Teaching Performance: An Inservice Kit, by Dr. Laurie Mireau is designed primarily for inservice settings. The Inservice Kit is designed for "hands-on" experience by individuals and by groups at the school and district levels. The Kit illustrates and emphasizes practical considerations and procedures useful in evaluating classroom activities and for integrating these with supervision of instruction.

An integral part of the Kit is a set of 30 videotapes (14 training tapes and 16 demonstration tapes) involving eleven classroom teachers in Edmonton Public Schools. The reader is directed to A Manual of Guidelines, (Vol. I), Appendix 2, for detailed descriptions of the 30 videotapes.

VOLUME IV

SUMMARIES OF INSTRUMENTS FOR USE IN EVALUATING TEACHING PERFORMANCE

The purpose of Volume IV is to assist personnel involved in the evaluation process, identify observation instruments which may be useful in preparing appropriate evaluation instruments in their areas. Few, if any, of the instruments for use by observers in this volume will be appropriate for direct use in their present form for local evaluations. However, descriptors and terms from the descriptions about the instruments may offer guidance in developing recording form(s) for use locally.

This volume includes:

1. A chart listing the nineteen criteria and their descriptions. These were introduced in A Manual of Guidelines, (Vol. 1), Chapter 4.
2. Summary sheets of 54 evaluation instruments. The first set of instruments (43) is concerned with the observation and recording of teaching behaviors on rating scales or checklists by a supervisor (Section A). Eleven instruments for recording student perceptions of teaching performance comprise the second set of instruments (Section B).

Each summary includes pertinent information about the instrument regarding publishing company, author, criteria evaluated, subject of observation, category dimension, and coding units.

A more detailed description of the instrument will follow those published in Evaluating Classroom Instruction, A Sourcebook of Instruments (Borich and Madden, 1977).

3. Reference tables which indicate what particular instruments might be useful in observing specific criteria. Table 1 depicts 43 instruments which may be used by a supervisor; Table 2 refers to 11 instruments for pupil assessment of teaching performance.

Abbreviated instrument names are listed alphabetically down the left side of the table, and the numbers 1 to 19 along the top refer to the 19 criteria. The "X" indicates which of the 19 criteria can be recorded on the instrument. Again the reader is cautioned that the nineteen criteria are not "standardized". The descriptions of the criteria are a more valid representation of the behavior than the "label" which others may use in slightly different ways.

NOTE: For those readers unfamiliar with observation methods and types of observation instruments, it is recommended that Chapters 5 and 6 in A Manual of Guidelines be read before this Volume.

NOTE: The percentages of agreement between two observers are frequently used as indices of reliability. The computation formula is as follows:

% of agreement = $100 \times (1 - \frac{x - y}{x + y})$ where x = the number of the particular target behavior recorded by the first observer or during the first observation by a single observer, and y = the number recorded by the second observer or during the second observation by a single observer (two separated observations of the same type by the same single observer are used to establish intra-observer reliability).

A lower limit within the range of 70-85 percent agreement is often set. If this standard is not met the decision will be to reject or revise the instrument and/or undertake more training of observer-recorders.

Chart A

Criteria Numbers	Criteria Names	Criteria Descriptions
1.	Plans, Organization, and Implementation	Arrangements and procedures worked out in advance of instruction by the teacher and the extent to which these are appropriate and used.
2.	Academic Learning Time	The time a student is engaged with instructional materials or activities that allow a high level of success for that student.
3.	Teacher's Expectations	The appropriateness of the teacher's predictions of the individual's or group's achievements in a particular content area.
4.	Teacher's Awareness	Alertness to pupil behavior at all times; "withitness," having "eyes in the back of one's head" (Kounin, 1970).
5.	Concurrent Tasks Management	The efficiency and ease with which a teacher handles various classroom activities at the same time.
6.	Pace of Instruction	The rate at which learning experiences are provided for pupils by the teacher.
7.	Classroom Management	The teacher's facility to anticipate, prevent and deal satisfactorily with pupils' interpersonal and academic difficulties. Success in appropriately disciplining pupils.

Criteria Numbers	Criteria Names	Criteria Descriptions
8.	Feedback to Pupils	Verbal and non-verbal responses to students.
9.	Time on Task	Engaged time; the time a student is attending to instruction in a particular content area.
10.	Enthusiasm	Teacher's display of eagerness and zeal.
11.	Clarity of Instruction	The communication of the teacher is such that the students are totally informed about what they should be doing, where to do it, and for how long, in order to ensure that students do not lose time because they are confused or because they are waiting for decisions to be made.
12.	Task Oriented/ Businesslike Orientation	The degree of academic focus and the teacher's directness in providing academically focussed instruction.
13.	Variability of Instruction	The appropriate use of variety in providing learning experiences for pupils.
14.	Flexibility	The ease with which the teacher adapts and adjusts satisfactorily to varying factors in the classroom setting.
15.	Understanding of Instructional Goals	The pupils' comprehension about what they should be doing, where to do it, and for how long.

Criteria Numbers	Criteria Names	Criteria Descriptions
16.	Teacher Centred/Direct Instruction	"An instructional strategy where time spent on instruction is sufficient and continuous, content covered is extensive, goals are clear to students, materials are structured and sequential, questions are low level to produce many correct student responses, student progress is monitored, feedback is immediate and correct responses are reinforced. With direct instruction, the teacher sets the goals, plans the activities, chooses the material; questions are convergent, not divergent; interaction is structured, not authoritarian; tasks are cognitive oriented, not humanistic" (Ornstein, 1984: 343).
17.	Praise and Encouragement/Criticism	The appropriate use of positive (e.g., praise and encouragement) and negative (e.g., criticism) reinforcement methods.
18.	Individualization of Instruction	Teaching adapted to the background, ability, and needs of individual learners.
19.	Questioning Techniques	Matching the types of questions asked of the student to the characteristics of the student and to the instructional objectives.

Section A:
Instrument Summaries for Supervisor Use

Instruments and Criteria for Supervisor Use

		Categories																		
Instrument		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1.	Cl. Beh. Tape Anal.	X							X					X				X		X
2.	Cl. Communication							X	X								X	X		
3.	Cl. Obs. Code Digest													X			X		X	
4.	Cl. Obs. Record			X				X						X			X			
5.	Classroom Creativity									X	X			X				X		
6.	Classroom Obs. Scales									X	X	X			X	X	X	X		X
7.	Cognitive Components			X										X		X				X
8.	Connors-Eisenberg	X										X		X				X		X
9.	CASES								X							X				
10.	CERLI Verbal-Beh.													X						X
11.	Disruptive Behaviour									X										
12.	Dodl													X			X	X		X
13.	Effective Teacher							X			X						X	X		
14.	Florida Climate	X						X					X				X	X		
15.	FAIR 33							X										X		X
16.	Hough								X	X					X			X	X	
17.	Jackson, Lahaderne							X		X			X			X		X	X	X
18.	Joyce			X					X					X	X			X	X	
19.	Kounin				X	X		X		X					X			X	X	
20.	Kounin, Friesen				X	X		X		X		X			X			X	X	
21.	MacDonald-Zaret			X					X						X			X		X
22.	Microenvironments							X		X							X	X		
23.	Miller-Hughes	X		X					X						X		X	X		
24.	Mini Total Interact.							X	X		X			X		X	X			
25.	Modified Category								X									X		X
26.	Nonverbal Interaction									X				X			X	X		
27.	OSCAR 4V								X				X				X	X		
28.	Provo Code	X		X					X				X					X		
29.	Pupil-Teacher Rapport									X			X				X	X		
30.	PART													X				X		
31.	Rev. Verb. Interact								X						X		X	X		X
32.	Social Weather												X		X		X	X		
33.	Student Activity									X										
34.	Student Behaviour									X										
35.	Student Obs. Form									X									X	
36.	SAVI							X							X		X	X		
37.	SICC														X		X	X		X
38.	STARS	X						X					X				X	X		
39.	Teacher Behaviour				X								X				X	X		X
40.	Teacher Verb-Nonverb				X							X	X				X	X		X
41.	Teacher-Child Dyadic			X					X								X	X		X
42.	Waimon								X			X					X	X		X
43.	Wallen's Flanders Mod.				X			X				X						X		X

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Classroom Behavior Tape Analysis Form (Cl. Beh. Tape Anal.#1)

AUTHOR: Daniel Solomon

AUTHOR/PUBLISHER ADDRESS: Center for the Study of Liberal Education for Adults
Chicago, Illinois

CRITERIA EVALUATED: 1, 8, 13, 17, 19

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED
☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

CODING UNITS

☒ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☐ LIVE
☐ LIVE WITH CODING EQUIPMENT
☒ VIDEO AND/OR AUDIO TAPE

CATEGORY DIMENSIONS

☒ AFFECTIVE
☒ COGNITIVE
☐ PROCEDURE OR ROUTINE
☐ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

OBSERVER(S) REQUIRED

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☐ TRAINING
☐ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Pages 150-152.

Name: CLASSROOM BEHAVIOR TAPE ANALYSIS FORM

Author: Daniel Solomon

Type of Measure: Observation coding system

Availability: Solomon, D. *Teaching styles and learning*. Chicago: Center for the Study of Liberal Education for Adults, 1963.

Description: The Classroom Behavior Tape Analysis Form (CBTAF) employs tape recordings of classroom interaction to yield indices of teacher and student behavior. Developed in a study of teacher style and student outcomes (Solomon, 1963), the CBTAF requires raters to tape and then classify verbal behaviors occurring in the classroom, using categories derived from: (1) a review of the literature; (2) theoretical and intuitive expectations; and (3) the results of an exploratory study by Solomon and Miller (1961). These categories, listed below, encompass 3 aspects of teacher behavior and 2 aspects of student participation.

I. Teacher Behavior

A. Statements

1. Providing Organization, Orientation
2. Providing Hypothesis
3. Providing Opinion
4. Providing Factual
5. Providing Interpretation
6. Providing Personal Reference

B. Questions

7. Requesting Organization, Orientation
8. Requesting Hypothesis
9. Requesting Opinion
10. Requesting Factual
11. Requesting Interpretation
12. Requesting, Nonspecific
13. Requesting Clarification

C. Feedback

14. Positive Reinforcement
15. Negative Reinforcement
16. No Reinforcement
17. High Information
18. Low Information
19. No Information
20. Residual

II. Student Behavior

A. Statements

21. Providing Organization, Orientation
22. Providing Hypothesis
23. Providing Opinion
24. Providing Factual
25. Providing Interpretation
26. Providing Personal Reference

B. Questions

27. Requesting Organization, Orientation
28. Requesting Hypothesis
29. Requesting Opinion
30. Requesting Factual
31. Providing Interpretation
32. Providing, Nonspecific
33. Providing Clarification
34. Residual
35. Tension Release

Sample Items: Solomon (1963) provides examples of the kinds of behaviors classified under each CBTAf category. "Requesting, Nonspecific," for example, includes any "unstructured invitation to participate (p. 138)," any comment which encourages group discussion. "No Reinforcement" refers to the teacher's "dispassionate reiteration of student's communication, silence, shift to another topic (p. 138)."

Reliability: Interrater reliability of the Tape Analysis Form was checked by Solomon (1963) on two occasions—at the end of the rater training period and midway through the actual tape analyses. On each of these occasions, 4 raters classified approximately 45 minutes of a tape to which they had not yet listened. The categories recorded by each rater were ranked according to their relative frequencies. The similarity among these rankings was computed using Kendall's coefficient of concordance. The first reliability check yielded a coefficient of .97 and the second, .84, each significant beyond the .001 level.

Intervisit correlations were also computed for each CBTAf category. The majority of these were above .50, and many exceeded .60, indicating a fair degree of stability in teacher behavior across class sessions (Solomon, 1963).

Validity: Solomon (1963) investigated concurrent validity by correlating CBTAf dimensions with similar variables measured by other instruments employed in his study. Amount of Teacher Speech on the CBTAf correlated significantly ($p < .05$) with the following items on the Student Questionnaire: Teacher Provides Main Directing Force (.80); Amount of Teacher Lecturing (.48); Instructor's Loss of Control (-.52); and Inter-Student Discussion (-.62). The CBTAf variable, Teacher's Personal References, correlated .54 with Expressed Opinions About Material and .65 with References to Self. Similarly, Teacher's Use of Negative Reinforcement was positively related (.71) to the Student Questionnaire item, Teacher's Use of Challenging, Embarrassing Techniques. Comparable correlations between CBTAf scores and observers' ratings of teacher behavior provide further evidence of validity.

Norms: The sample used in the Solomon (1963) study was composed of 24 college instructors teaching evening courses in Introductory American Government at 13 schools. All of the schools were located in the Midwest, except 1, which was in a large Eastern city. Class size ranged from 11 to 38. Students were predominantly male, "working full time," and from 16 to 60 years old (median age = 20).

Procedures for Use: In using the CBTAf, the entire class session is recorded. Statements and questions of the teacher and students are coded as they occur on the tape, all student speech being scored together rather than separately for individual students.

A number of indices can be derived from the tape, including: (1) the proportion of teacher and student talk falling into each of the speech categories; (2)

the ratio of each category of teacher talk to the same category of student talk ;
and (3) the percentage of total talk contributed by the teacher.

Comments: The Classroom Behavior Tape Analysis Form attempts to assign every statement made in the classroom to a meaningful category. The CBTAF focuses on relatively small units of behavior, which are scored immediately. The tape recording provides a permanent record of classroom activity; thus there is no reliance on the observer's memory. Because this instrument considers only the verbal behavior of students and teachers, it is perhaps best used in conjunction with other measures of classroom interaction. This is, in fact, how Solomon has employed the CBTAF in the past.

References: Solomon, D., *Teaching styles and learning*. Chicago: Center for the Study of Liberal Education for Adults, 1963.

Solomon, D., W. E. Bezdek, Rosenberg, L., "Dimensions of teacher behavior." *Journal of Experimental Education*, 1964, 33(1), 23-40.

Solomon, D., and H. L. Miller, *Exploration in teaching styles*. Chicago: Center for the Study of Liberal Education for Adults, 1961.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: System for the Analysis of Classroom Communication (CI. Communication #2)

AUTHOR: Margaret Hubbard Jones
AUTHOR/PUBLISHER ADDRESS: University of California, Los Angeles, California

CRITERIA EVALUATED: 7, 8, 16, 17, 19

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED

☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

CODING UNITS

☒ CATEGORY CHANGE
☐ TOPIC CHANGE
☒ SPEAKER CHANGE
☒ TIME UNIT
☐ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

CATEGORY DIMENSIONS

☒ AFFECTIVE
☒ COGNITIVE
☐ PROCEDURE OR ROUTINE
☐ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

OBSERVER(S) REQUIRED

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☐ TRAINING
☒ EVALUATION

REFERENCE:

Mirrors for Behavior III: An Anthology of Instruments, Anita Simon and E. Gil Boyer, Communications Materials Center, Wyncote, Pennsylvania, 1974, Pages 333-335.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Classroom Observation Code Digest (Cl. Obs. Code Digest, #3)

AUTHOR: Francis G. Cornell, Carl L. Lindvall, Joe L. Saupe

AUTHOR/PUBLISHER ADDRESS: Bureau of Educational Research, College of Education

CRITERIA EVALUATED: 13, 16, 18

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

CODING UNITS

NUMBER OF SUBJECTS OBSERVED
☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

☒ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☐ TIME UNIT
☒ TIME SAMPLE
☒ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

CATEGORY DIMENSIONS

☒ AFFECTIVE
☒ COGNITIVE
☒ PROCEDURE OR ROUTINE
☒ ACTIVITY
☒ SOCIOLOGICAL STRUCTURE
☐ OTHER

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☐ TRAINING
☐ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Pages 438-440.

Name: CLASSROOM OBSERVATION CODE DIGEST

Authors: Francis G. Cornell, Carl M. Lindvall, and Joe L. Saupe

Type of Measure: Observation coding system

Availability: Cornell, F. G., C. M. Lindvall, and J. L. Saupe, *An exploratory measurement of individualities of schools and classrooms*. Urbana, Illinois: Bureau of Educational Research, College of Education, University of Illinois, 1952.

Description: The Classroom Observation Code Digest was developed to measure differences in classrooms as an index of differences in school systems. After an extensive review of the literature, an evaluation of related measurement attempts, and empirical testing, the following dimensions were selected for inclusion on the Digest:

1. Differentiation—the extent to which the teacher recognizes individual differences among students.
2. Social Organization—the group structure and the pattern of interaction characterizing the classroom.
3. Pupil Initiative—the extent to which pupils are allowed to determine the learning situation.
4. Content—what is taught in the classroom.
5. Variety—the degree to which a variety of activities or techniques are used.
6. Competency—the technical performance of the teacher.
7. Classroom Climate (Teacher)—the social/emotional atmosphere of the classroom as reflected in the teacher's behavior.
8. Classroom Climate (Pupils)—the social/emotional atmosphere of the classroom as reflected in the pupils' behavior.

Sample Items: Each of the 8 dimensions represented on the Digest is designed to measure 1 aspect of a classroom learning situation. The Digest contains brief definitions of behavioral codes which are recorded by the observer on an accompanying tally sheet, labeled the Classroom Observation Schedule. The specific behaviors listed below are similar to those included in several of the Digest categories:

<i>Dimension</i>	<i>Behavior</i>
Variety	1. Pupils involved in class discussion.
	2. Pupils performed a demonstration.
	3. Teacher read aloud from text.
	4. Teacher showed a film.

- Competency
1. Teacher conducted a review lesson.
 2. Teacher provided relevant examples.
 3. Teacher allowed discussion to continue aimlessly.
 4. Teacher's answers to pupil questions were vague and ambiguous.

Reliability: In order to determine the instrument's reliability, the Digest was tested in 32 classrooms, each visited 3 times by 6 observers in teams of 2. During each visit, observers independently recorded behaviors for 30 minutes. Coefficients reported by Cornell, Lindvall, and Saupe (1952) range from .42 to .89 for a single observer's measurement, and from .59 to .94 for a team's measurement. In each case, the Competency dimension was least reliable, while Social Organization was most reliable. The single observer coefficients are, according to the authors, "similar in meaning to the correlations of 2 forms of a test (Cornell, Lindvall, and Saupe, 1952, p. 36)." The team estimates, however, are best described as indices of observer agreement (Medley and Mitzel, 1963). As such, the latter assess the objectivity of the Digest, but do not indicate its power to discriminate among classrooms. In a later study, Medley and Mitzel (1958) produced reliability coefficients which do indicate the discriminating power of the dimensions, as well as indices of observer agreement. Their estimates, based on 25-minute observations of 33 New York City classrooms made by 6 observers in teams of 2, range from .00 (Climate—Pupil) to .66 (Social Organization) for interobserver agreement, and from .00 (Climate—Pupil) to .42 (Variety) for discriminating power. The lower reliabilities obtained by Medley and Mitzel are perhaps a reflection of the more homogeneous sample used in their study (Medley and Mitzel, 1963).

Validity: During the development of the Classroom Observation Code Digest, 118 teachers responded to a questionnaire asking them to name the dimensions they considered most likely to distinguish one classroom from another. Responses to this questionnaire served as a check on the validity of the dimensions included on the Digest. The results were analyzed, categorized, and found to support the authors' original selection of dimensions (Cornell, Lindvall, and Saupe, 1952).

Further evidence of validity was provided in a pilot study of the Digest, results of which indicated that the dimensions significantly discriminate among classrooms. Each dimension was found to differ significantly on at least 1 of 5 sources of variation (Cornell, Lindvall and Saupe, 1952).

Norms: Data used in the pilot studies were collected from 32 classrooms in 4 "rural/urban" school districts in a central Illinois county and 4 "suburban-metropolitan" districts in a high socioeconomic area near Chicago. For each school system, 1 class was observed at each of 4 grade levels: fourth, sixth, eighth, and tenth (Cornell, Lindvall, and Saupe, 1952).

Data have also been collected in 33 elementary classrooms in New York City (Medley and Mitzel, 1958).

Procedures for Use: The observer uses the Digest as a guide in recording behavior on the Observation Schedule, or tally sheet. For the first 4 dimensions, he or she enters a number, representing the appropriate description of the classroom situation, for each 5-minute interval in a 1-hour visit. For the fifth dimension, each kind of behavior observed during 5-minute intervals is checked. Behaviors observed on the remaining dimensions are recorded only once during each visit.

The scoring procedure yields a single value for each dimension except Variety, which is scored once for the number of different activities observed, and once for the duration of these activities.

Comments: The Classroom Observation Code Digest is an economical and relatively uncomplicated measure of classroom characteristics. Observers need only about 15 hours of training to code a wide variety of items, many of which require little inference.

References: Cornell, F. G., C. M. Lindvall, and J. L. Saupe, *An exploratory measurement of individualities of schools and classrooms*. Urbana, Illinois: Bureau of Educational Research, College of Education, University of Illinois, 1952.

Medley, D. M. and H. E. Mitzel, "Application of analysis of variance to the estimation of the reliability of observations of teachers' classroom behavior." *Journal of Experimental Education*, 1958, 27, 23-25.

Medley, D. M. and H. E. Mitzel, "Measuring classroom behavior by systematic observation," in N. L. Gage (ed.), *Handbook of research on teaching* Chicago: Rand McNally, 1963.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Classroom Observation Record (Cl. Obs. Record #4.)

AUTHOR: Henry Morrison McGee

AUTHOR/PUBLISHER ADDRESS: Source in McGee (1955)

CRITERIA EVALUATED: 3, 7, 13, 16,

SUBJECT OF OBSERVATION

SETTINGS

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

CODING UNITS

NUMBER OF SUBJECTS OBSERVED
☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

☒ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

CATEGORY DIMENSIONS

☒ AFFECTIVE
☐ COGNITIVE
☒ PROCEDURE OR ROUTINE
☐ ACTIVITY
☒ SOCIOLOGICAL STRUCTURE
☐ OTHER

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☐ TRAINING
☐ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Pages 441-443.

Name: CLASSROOM OBSERVATION RECORD

Author: Henry Morrison McGee

Type of Measure: Observation coding system

Availability: McGee, H. M., "Measurement of authoritarianism and its relation to teachers' classroom behavior." *Genetic Psychology Monographs*, 1955, 52, 89-146.

Description: The Classroom Observation Record was developed by McGee (1955) to assess classroom behavior related to authoritarianism in teachers. The initial form of the Record contained 13 categories of teacher behavior and 4 categories of pupil behavior, all presumed on the basis of theoretical and empirical studies, notably those reported in *The Authoritarian Personality* (Adorno, Frenkel-Brunswick, Levinson, and Sanford, 1950), to be associated with authoritarianism. Each of these categories was accompanied by a set of specific behaviors defining it, and a hypothesis concerning its connection with authoritarianism. The behaviors composing all 13 categories in combination formed a Glossary of terms to be used by the observer in coding classroom activity.

A preliminary study of 50 elementary and secondary school teachers revealed a number of deficiencies in both the Record and the Glossary. As a result, descriptive behaviors with low discriminating power were eliminated, and several categories were revised to accommodate the dichotomous nature of the authoritarian character structure.

The dimensions of teacher behavior included on the revised form of the Record are: Aloof vs. Approachable; Unresponsive vs. Responsive; Dominative vs. Integrative; Irresponsible vs. Responsible; Harsh vs. Kindly; Immature vs. Mature; Inflexible vs. Adaptable; Insensitive vs. Sensitive; Narrow vs. Broad; Partial vs. Fair; Pessimistic vs. Optimistic; Stereotyped vs. Liberal; and Suspicious vs. Trusting. Pupil behavior categories are: Unresponsive vs. Responsive; Dependent vs. Initiating; Obstructive vs. Responsible; and Uncertain vs. Confident.

Sample Items: Each specific descriptive behavior included in the Record's 17 categories relates to 1 or more of the variables comprising the authoritarian syndrome. Furthermore, each is observable. The following behaviors are similar to those which are coded on the Classroom Observation Record.

<i>Variable</i>	<i>Behavior</i>
Harsh vs. Kindly	1. Teacher ridiculed child in front of class. 2. Teacher pointed out positive aspects of pupil's performance.

- Stereotyped vs. Liberal
1. Teacher treated pupils as a homogeneous group, rather than as individuals.
 2. Teacher explored problems, leaving room for questions and exceptions.

Reliability: Reliability of the obtained behavior scores was computed on a sample of 150 teachers, classified according to volunteer/nonvolunteer status, sex, teaching level, and minority/majority group membership. Pearson r_s , corrected by the Spearman-Brown formula, ranged from .85 to .97. Overall reliability was estimated at .90 (McGee, 1955).

Agreement between observations was computed by correlating the first and second observations of 2 coders, yielding a coefficient of .74. Also, one of these coders and a timed observer simultaneously but independently recorded the behavior of 10% of the sample ($N = 15$). A rank-difference correlation of .89 was obtained between the 2 sets of scores (McGee, 1955).

Validity: Evidence for validity is drawn from 3 sources: item analysis; relationship to similar constructs; and differences between groups.

Internal consistency of the behavioral dimensions, established through item analysis, suggests validity by demonstrating that even the least discriminating categories significantly differentiated between high and low scorers (McGee, 1950).

Empirical validity is indicated by a correlation of .58 between mean behavior scores obtained on the Record and a modified form of the F-Scale, a measure of authoritarianism devised by Adorno, Frenkel-Brunswik, Levinson, and Sanford (1955).

Further evidence of the validity of teacher scores is provided by a highly significant critical ratio of 3.3 between the mean pupil behavior score obtained in classrooms of less authoritarian teachers and that obtained in classrooms of more authoritarian teachers (McGee, 1955).

Norms: Normative data are available for the 184 regular classroom teachers whose behavior was originally coded on the Classroom Observation Record. This sample included men and women, 25 to 30 years of age, teaching at the elementary or secondary level in the public schools of Oakland, California. No one in the sample had taught more than 3 years (McGee, 1955).

Procedures for Use: Before employing the Classroom Observation Record, the user should carefully train prospective observers and then pilot-test the system for agreement among them. This procedure may take as long as 4 weeks.

When observers are ready to enter the classroom, they should do so unobtrusively, situating themselves at the side or rear of the room. Behaviors are recorded as they are observed, unless coding appears to be causing some anxiety on the subjects' part, in which case observed behaviors may be entered immediately after class. An observation period of 45 to 50 minutes is considered optimal length.

Numerical values are assigned to each category according to the number of specific behaviors recorded in that category during a single observation period. For the 13 categories of teacher behavior, total scores can range from 13 to 91 points, a high score indicating strong authoritarian behavior.

Comments: While this instrument does not claim to represent all features of the authoritarian personality, it does include a good sample of those which are commonly expressed in the classroom. Although it requires extensive observer training, the Classroom Observation Record can be a valuable research tool.

References: Adorno, T. W., E. Frenkel-Brunswik, D. S. Levinson, and R. N. Sanford, *The authoritarian personality*. New York: Harper, 1950.

McGee, H. M., "Measurement of authoritarianism and its relation to teachers' classroom behavior." *Genetic Psychology Monographs*, 1955, 52, 89-146.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Classroom Creativity Observation Schedule (Classroom Creativity #5)

AUTHOR: David A. Denny, Reuben Rusch, Sammie Ives

AUTHOR/PUBLISHER ADDRESS: D. A. Denny, State University College

CRITERIA EVALUATED: 10, 13, 17

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

CODING UNITS

NUMBER OF SUBJECTS OBSERVED
☒ 1 ONLY
☐ MORE THAN 2 PEOPLE IN CLASSROOM

☒ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☐ TIME UNIT
☒ TIME SAMPLE
☒ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

CATEGORY DIMENSIONS

☒ AFFECTIVE
☒ COGNITIVE
☐ PROCEDURE OR ROUTINE
☒ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☒ TRAINING
☒ EVALUATION

REFERENCE:

Mirrors for Behavior III: An Anthology of Instruments, Anita Simon and E. Gil Boyer, Communications Materials Center, Wyncote, Pennsylvania, 1974, Pages 219-222.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Classroom Observation Scales (Classroom Obs. Scales #6)

AUTHOR: Edmund T. Emmer

AUTHOR/PUBLISHER ADDRESS: Research and Development Center for Teacher Education

CRITERIA EVALUATED: 9, 10, 11, 14, 15, 16, 17, 19

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED

☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

CODING UNITS

☒ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

CATEGORY DIMENSIONS

☒ AFFECTIVE
☒ COGNITIVE
☒ PROCEDURE OR ROUTINE
☒ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

OBSERVER(S) REQUIRED

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☒ TRAINING
☒ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Pages 444-446.

Name: CLASSROOM OBSERVATION SCALES

Author: Edmund T. Emmer

Type of Measure: Observation coding system

Availability: Emmer, E. T. *Classroom observation scales*. Austin, Texas: Research and Development Center for Teacher Education, University of Texas, 1971.

Description: The Classroom Observation Scales (COS) are intended to measure "classroom process variables for research on teaching and to provide an instructional tool in teacher education (Emmer, 1971, p. i)." They are designed for use in the classroom by trained observers. The 12 variables measured by this instrument are listed and briefly described below.

1. *Pupil Attention* refers to student orientation toward the teacher, the task at hand, or the predominant classroom activity.
2. *Teacher-Initiated Problem Solving* indicates a mode of teacher behavior characterized by frequent presentation of questions and problems to the entire class.
3. *Pupil-to-Pupil Interaction* includes substantive utterances of one student directed at another or at a group of students, as well as indirect or unsolicited responses to the teacher.
4. *Teacher Presentation* refers to the relative amount of class time devoted to teacher presentation of substantive information.
5. *Negative Affect* is used to record behaviors which reflect negative or hostile feelings on the part of either the teacher or the pupils.
6. *Positive Affect* encompasses teacher behaviors which support or show positive feeling for pupils and their behavior.
7. *Higher Level Cognitive Student Behavior* refers to pupil verbalizations which reflect more complex cognitive processes.
8. *Passive Pupil Behavior* measures the extent to which pupils demonstrate passive behaviors, such as visual wandering or withdrawal from engagement with surroundings.
9. *Convergent-Evaluative Interaction* is characterized by a focus upon obtaining the correct answer to a teacher question, with little or no attempt to continue contact once the answer has been obtained.
10. *Task Orientation* measures the degree to which the teacher works toward content-related, substantive goals.
11. *Clarity* refers to the degree to which the teacher's presentations and interactions are understood by the pupils.
12. *Enthusiasm* indicates the extent to which the teacher demonstrates interest, vitality, and involvement in his subject and his teaching.

Sample Items: The COS manual (Emmer, 1971) lists specific behaviors and interactions typical of those which are recorded on each of the 12 scales. For example, attention (Scale 1) may be inferred from the following pupil behaviors: maintaining eye contact with the teacher; working on an assigned activity; or raising hand to volunteer a response.

Reliability: Reliability of the COS was established using data collected by graduate and undergraduate students who received approximately 6 hours of training, including practice observations of both videotapes and live classrooms. For each of 2 data sets, the manual presents 2 indices of interobserver agreement (intraclass correlations and average difference scores) along with estimates of stability. Intraclass correlations for data set 1 yielded reliability estimates for single observer scores ranging from .07 (Task Orientation) to .71 (Teacher Presentation). Corresponding correlations for data set 2 ranged from .06 (Higher Level Cognitive Pupil Behavior) to .81 (Pupil Attention). Reliability estimates for the average of 2 observers' scores ranged from .13 (Task Orientation) to .83 (Teacher Orientation) for data set 1, and from .12 (Higher Level Cognitive Pupil Behavior) to .89 (Pupil Attention) for data set 2. Average difference scores ranged from .31 (Pupil Attention) to .90 (Pupil-to-Pupil Interaction) for data set 1, and from .59 (Pupil Attention, Teacher Presentation, and Enthusiasm) to .90 (Teacher-Initiated Problem Solving) for data set 2.

Stability estimates were computed for single observations and for the average of 5 observations of each class. The former ranged from .08 (Task Orientation) to .65 (Enthusiasm) for data set 1 and from .10 (Convergent-Evaluative Interaction) to .64 (Pupil Attention) for data set 2. Stability estimates for an average of 5 observations ranged from .27 (Task Orientation) to .89 (Enthusiasm) for data set 1, and from .30 (Convergent-Evaluative Interaction) to .87 (Pupil Attention) for data set 2.

Validity: All but 3 of the 12 Classroom Observation Scales are empirically based. In developing the scales, observations were collected on 5 occasions in 28 fifth- and eighth-grade classrooms, using 5 coding systems: CASES (Spaulding, 1970); CCS (Emmer and Albrecht, 1970); Dyadic Interaction System (Good and Brophy, 1970); FAIR (Fuller, 1970); and OScAR 5V (Medley et al., 1968). Categories in each of these systems were intercorrelated, and these intercorrelations were then factor analyzed. The factors which emerged were intercorrelated across systems to yield common factors. Scales were defined using the behavioral categories associated with each factor.

Three scales (Task Orientation, Clarity, and Enthusiasm) not derived through factor analysis were also included since they had been associated with positive pupil outcomes in several different studies (Emmer, 1971).

Norms: The Classroom Observation Scales have been used in several research studies. The samples which served as the source for reliability data were composed of 15 fifth-grade classrooms and 31 first- and second-grade class-

rooms, each videotaped on 4 or 5 occasions and coded independently by 2 observers.

Procedures for Use: In using the COS, the observer should be situated so that he can see both the teacher and the pupils. Ideally, he should be able to observe the faces of all students. Thus situated, he records, at 15-minute intervals, observed behaviors on a printed coding form.

Comments: The Classroom Observation Scales are easy to learn and use, and they are, for the most part, behaviorally based. They may be effectively used in research, evaluation, or teacher performance feedback. However, the user should note that several of the scales (Higher Level Cognitive Pupil Behavior, Task Orientation, and Passive Pupil Behavior) have produced marginal or inconsistent reliability data. Furthermore, in using the scales, at least 4 or 5 observations should be collected. Otherwise, the user may obtain data which are not sufficiently reliable.

References: Brophy, J. E., and T. L. Good, *Teacher-child dyadic interaction: A manual for coding classroom behavior*. Austin, Texas: Research and Development Center for Teacher Education, University of Texas, 1970.

Emmer, E. T., *Classroom observation scales*. Austin, Texas: Research and Development Center for Teacher Education, University of Texas, 1971.

Emmer, E. T. and I. D. Albrecht, *The Cognitive Component System (CCS) manual*. Austin, Texas: Research and Development Center for Teacher Education, University of Texas, 1970.

Fuller, F. F., *FAIR system manual*. Austin, Texas: Research and Development Center for Teacher Education, University of Texas, 1970.

Medley, D. M., C. G. Schluck, and N. P. Ames, *Assessing the learning environment in the classroom: A manual for users of OSCAR 511*. Princeton, New Jersey: Educational Testing Service, 1968.

Spaulding, R. L., *Classroom behavior analysis and treatment*. San Jose, California: San Jose State College, 1970.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Cognitive Component System (Cognitive Components #7)

AUTHOR: E. T. Emmer, I. D. Albrecht

AUTHOR/PUBLISHER ADDRESS: Research and Development Center for Teacher Education, University of Texas, Austin, Texas

CRITERIA EVALUATED: 3, 13, 19

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED

☒ 1 ONLY
☐ MORE THAN 2 PEOPLE IN CLASSROOM

CODING UNITS

☒ CATEGORY CHANGE
☒ TOPIC CHANGE

☐ SPEAKER CHANGE
☒ TIME UNIT
☐ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

CATEGORY DIMENSIONS

☐ AFFECTIVE
☒ COGNITIVE
☐ PROCEDURE OR ROUTINE
☒ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☐ RESEARCH
☐ TRAINING
☐ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Pages 447-448.

Name: COGNITIVE COMPONENT SYSTEM

Authors: Edmund T. Emmer and I. Dorothy Albrecht

Type of Measure: Observation coding system

Availability: Emmer, E. T., and I. D. Albrecht, *The Cognitive Component System (CCS) manual*. Austin, Texas: Research and Development Center for Teacher Education, University of Texas, 1970.

Description: The Cognitive Component System (CCS) was designed to measure the cognitive functioning of students and teachers in the classroom. It is used by trained observers, who code cognitive behaviors according to 5 categories: Association, Description, Conceptualization, Generalization, and Inference. These categories are tallied in a manner which distinguishes teacher and student behaviors as well as presenting, responding, and soliciting behaviors. These distinctions produce 30 classifications of cognitive behavior, which are supplemented by 3 activity categories—Directing and Managing, Individual Seat Work, and Group Work—bringing the total number of CCS discriminations to 33.

Sample Items: The CCS manual explicitly defines the system's categories and lists behaviors which are typically coded under each heading. For example, Association is defined as "verbatim reproduction of verbal sequences, a stimulus/response chain without apparent mediators (Emmer and Albrecht, p. 5)." Teacher questions and student responses involving memorization, drill, and recall are coded in this category.

Reliability: Estimates of between-observer agreement, based on intraclass correlations, are presented in the manual for each CCS category. These range from .11 (Student Responds Inference) to .98 (Teacher Solicits Association), with most being in the .80s or .90s. Reliability coefficients are not reported for 7 categories in which insufficient behavior was observed.

Estimates of between-observer agreement for combined CCS categories range from .83 to .98.

Validity: The development of the CCS and the selection of its behavioral categories are not described in the manual. The system's theoretical rationale is not discussed, and no evidence from which to infer validity is provided.

Norms: Data in the manual are based on 15 ½-hour videotapes made in fifth- and eighth-grade classrooms, with 2 observers coding each tape.

Procedures for Use: CCS codings can be made from audiotapes, videotapes, or live observations of classroom interaction. The observer indicates each cognitive statement on a tally sheet. Each entry on the sheet describes 1 unit of behavior—usually a sentence—which represents a single, complete thought. If a thought is repeated (if, for example, a teacher restates a student remark), it is coded only when it first occurs, unless it has been modified or expanded in some way.

Noncognitive behaviors, such as affective communications or routine response acknowledgements, are ignored. This rule, however, does not apply to the 3 classroom activity categories, which are included to provide an estimate of the amount of seat work, group work, and nonsubstantive activity (directing and managing). Behaviors falling in these 3 categories are coded in time, rather than thought, units. The observer records these behaviors at 3-second intervals—unless they are occurring over an extended period, in which case he or she merely “times” them with a stopwatch and enters the duration of occurrence directly onto the tally sheet.

After the observation is completed, entries on the tally sheet are totalled. These frequency counts can be used individually or in combination to yield a variety of information.

Comments: The Cognitive Component System is easy to learn and to use. Coders can be trained in a relatively brief period of time, and, since tallying is done using paper and pencil only, no elaborate or expensive equipment is required. Although CCS reliabilities are generally high, this system could be more confidently recommended if its manual provided some information from which to infer validity.

Reference: Emmer, E. T., and I. D. Albrecht, *The Cognitive Component System (CCS) manual*. Austin, Texas: Research and Development Center for Teacher Education, University of Texas, 1970.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Connors-Eisenberg System (Connors-Eisenberg #8)

AUTHOR: C. Keith Connors, Leon Eisenberg
AUTHOR/PUBLISHER ADDRESS:

CRITERIA EVALUATED: 1, 11, 13, 17

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

CODING UNITS

NUMBER OF SUBJECTS OBSERVED

☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

☒ CATEGORY CHANGE
☐ TOPIC CHANGE

☐ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☒ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

CATEGORY DIMENSIONS

☒ AFFECTIVE
☒ COGNITIVE
☐ PROCEDURE OR ROUTINE
☒ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☐ TRAINING
☐ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Pages 153-155.

Name: CONNERS-EISENBERG OBSERVATION SYSTEM

Authors: C. Keith Conners and Leon Eisenberg

Type of Measure: Observation coding system

Availability: Conners, C. K., and L. Eisenberg. *The effect of teacher behavior on verbal intelligence in Operation Headstart children*. Baltimore, Maryland: School of Medicine, Johns Hopkins University, 1966. (ERIC Document Reproduction Service No. 010 782)

Description: This observation system is designed to measure 3 sets of teacher and classroom variables. First, observers classify teacher behavior *episodes* according to Communication, Management, and Encouragement. Second, they record the degree to which teacher *activities* promote the following "values":

1. Development of an adequate self-concept, emotional stability, and a sense of security;
2. Intellectual growth;
3. Personal responsibility for private or community property;
4. Cultural habit training;
5. Consideration for others;
6. Achievement orientation;
7. Development of physical abilities and skills;
8. Creativity; and
9. Obedience and self-control.

Third, observers make *overall judgments* of teacher performance on four 6-point scales: Warmth vs. Coldness; Permissiveness vs. Restrictiveness; Active vs. Passive; and Variety vs. Non-Variety.

Sample Items: Observations of teacher behavior are recorded as discrete episodes, as suggested by Baldwin (1960) and Reichenberg-Hackett (1962). An episode is defined as "a change in the triangular relationship between teacher, child, and environment, no matter how small this change might be (Conners and Eisenberg, 1966, p. 4)." A change of subject, for example, or a shift of the teacher's attention, signals the end of one episode and the beginning of another. Each statement made by the teacher is recorded verbatim.

Related episodes are grouped to form teacher activities, which are then scored according to the values listed in the previous section.

Reliability: To determine interobserver agreement, 2 raters independently scored sample protocols for all categories. Spearman rank-order correlation coefficients ranged from .79 (promotion of obedience and self-control) to .97 (promotion of physical abilities and skills), with a mean of .87.

Data collected by all 8 observers on 6 teachers indicated that the greatest variation from one observer to another occurred in the overall teacher ratings. Since the 4 global ratings were highly intercorrelated, they were combined to

form a single "good vs. bad" score. An analysis of variance was then performed on the data, and an intraclass correlation of .82 was computed. This coefficient, which is equivalent to the average intercorrelation among all 8 observers, may be considered a measure of the reliability of individual scores (Conners and Eisenberg, 1966).

No data on the reliability of episode definition were collected. However, according to Conners and Eisenberg (1966), training sessions conducted prior to the observations indicated that raters generally agreed in determining episode boundaries.

Validity: Validity is suggested by correlations between teacher characteristics, as recorded on the Conners-Eisenberg system, and the intellectual growth of pupils, as measured by the Peabody Picture Vocabulary Test (PPVT). For example, teacher activities judged as promoting intellectual growth were strongly associated with increased PPVT scores. Similarly, teacher behavior which placed a high value on property rights and care of materials produced little change in PPVT scores. Teachers rated as warm, active, permissive, and varied produced more intellectual growth than those judged low on these traits (Conners and Eisenberg, 1966).

Norms: Subjects in the Conners and Eisenberg study were 38 teachers (32 from public schools and 6 from a privately operated church nursery school) and 500 children participating in a Headstart program in Baltimore City in the summer of 1965.

Procedures for Use: In using this system, observers take general notes on an entire day's activities, but record a 1-hour period in great detail. As unobtrusively as possible, they record teacher behavior as discrete episodes. When the observation interval is over, these episodes are scored in 2 ways. According to the first procedure, each episode is scored for 1 or more of the following variables: (1) Communication (to the child, the group, or an adult); (2) Management (altering a child's activity, either positively, by suggesting a substitute activity, or negatively, by simply interrupting or stopping the activity); and (3) Encouragement. The second scoring procedure groups related, consecutive episodes to form teacher activities, which are then scored according to the degree to which they foster 9 specific "values." A teacher is classified as being "high," "medium," or "low" on each value, relative to other teachers.

Finally, each teacher is given an overall score on Warmth, Permissiveness, Activity, and Variety.

Comments: The Conners-Eisenberg Observation System is appropriate for use in assessing elementary or nursery school teachers. It yields 3 sets of scores from 1 set of data and, therefore, is an economical research tool. Although the categories appear to require considerable inference on the observer's part, indices of interrater agreement are high.

References: Baldwin, A. L., "The study of child behavior and development," in P.

Mussen (ed.), *Handbook of research methods in child development*. New York: Wiley, 1960.

Conners, C. K., and L. Eisenberg, *The effect of teacher behavior on verbal intelligence in Operation Headstart children*. Baltimore, Maryland: School of Medicine, Johns Hopkins University, 1966. (ERIC Document Reproduction Service No. ED 010 782)

Reichenberg-Hackett, W., "Practices, attitudes, and values in nursery group education." *Psychological Reports*, 1962, **10**, 151-172.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Coping Analysis Schedule for Educational Setting (CASES) (CASES #9)

AUTHOR: Robert L. Spaulding

AUTHOR/PUBLISHER ADDRESS: Duke University, Durham, North Carolina

CRITERIA EVALUATED: 9, 15

SUBJECT OF OBSERVATION

☐ TEACHER AND PUPILS
☐ TEACHER ONLY
☒ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED

☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

CODING UNITS

☐ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☐ TIME UNIT
☒ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

CATEGORY DIMENSIONS

☒ AFFECTIVE
☐ COGNITIVE
☐ PROCEDURE OR ROUTINE
☒ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

USES REPORTED BY AUTHOR

☒ RESEARCH
☒ TRAINING
☐ EVALUATION

REFERENCE:

Mirrors for Behavior III: An Anthology of Instruments, Anita Simon and E. Gil Boyer, Communications Materials Center, Wyncote, Pennsylvania, 1974, Pages 587-589.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: CERLI Verbal-Behavior Classification System (CERLI Verbal-Beh #10)

AUTHOR: Cooperative Educational Research Laboratory, Inc.

AUTHOR/PUBLISHER ADDRESS: Cerli, North Field, Illinois

CRITERIA EVALUATED: 13, 19

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☒ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED

☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

CODING UNITS

☒ CATEGORY CHANGE
☐ TOPIC CHANGE
☒ SPEAKER CHANGE
☒ TIME UNIT
☐ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

CATEGORY DIMENSIONS

☒ AFFECTIVE
☒ COGNITIVE
☒ PROCEDURE OR ROUTINE ACTIVITY
☒ SOCIOLOGICAL STRUCTURE
☐ OTHER

OBSERVER(S) REQUIRED

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☒ TRAINING
☐ EVALUATION

REFERENCE:

Mirrors for Behavior III: An Anthology of Instruments, Anita Simon and E. Gil Boyer, Communications Materials Center, Wyncote, Pennsylvania, 1974, Pages 215-218.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Disruptive Behavior Schedule (Disruptive Behaviour #11)

AUTHOR: Wesley C. Becker, Charles H. Madsen, Jr., Carole R. Arnold, Don R. Thomas
AUTHOR/PUBLISHER ADDRESS:

CRITERIA EVALUATED: 9

SUBJECT OF OBSERVATION

☐ TEACHER AND PUPILS
☐ TEACHER ONLY
☒ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

CODING UNITS

NUMBER OF SUBJECTS OBSERVED
☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

☒ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☒ TIME UNIT
☐ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

CATEGORY DIMENSIONS

☐ AFFECTIVE
☐ COGNITIVE
☐ PROCEDURE OR ROUTINE
☒ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☐ TRAINING
☐ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Pages 351-353.

Name: DISRUPTIVE BEHAVIOR SCHEDULE

Authors: Wesley C. Becker, Charles H. Madsen, Jr., Carole R. Arnold, and Don R. Thomas

Type of Measure: Observation coding system

Availability: Becker, W. C., C. H. Madsen, Jr., C. R. Arnold, and D. R. Thomas, "The contingent use of teacher attention and praise in reducing classroom behavior problems." *Journal of Special Education*, 1967, 1(3), 287-307.

Description: The Disruptive Behavior Schedule was developed in a study of behavior modification in the elementary school classroom (Becker, Madsen, Arnold, and Thomas, 1967). After "problem" children had been selected for observation, preliminary coding categories were constructed to reflect pupil behaviors which: (1) interfered with classroom learning; (2) violated classroom rules; (3) were considered undesirable by the teacher (e.g., thumbsucking); (4) were similar within categories; (5) were different between categories; and (6) were observable rather than inferred. These categories were tested and revised over a 4-week period to insure that the pupil behaviors represented did in fact occur frequently enough to constitute a problem and be reliably rated. When interrater agreement of at least 80% could not be attained, the category in question was abandoned or redefined. These selection procedures produced the coding categories listed below, 7 of which were applied to each child observed and 4 of which were devised especially for particular children. The final category was included to record each child's "time on task."

A. General Categories of Disruptive Behavior

1. Gross Motor Behaviors
2. Disruptive Noise with Objects
3. Aggression—Disturbing Others Directly
4. Orienting Responses
5. Blurting Out, Commenting, and Vocal Noise
6. Talking
7. Other

B. Special Categories of Disruptive Behavior

1. Improper Position
2. Sucking
3. Bossing
4. Ignoring

C. Relevant Behavior

Sample Items: Specific behaviors coded under each category are listed by the authors. For example, Orienting Responses includes "turning head or head and body to look at another person, showing objects to another child, attending to another child (Becker et al., 1967, p. 290)."

Reliability: Since the Disruptive Behavior Schedule has been employed in a

number of studies, several estimates of interrater reliability are available. When the instrument was initially used, (Becker et al., 1967), reliabilities above 80% were obtained prior to baseline data collection. Checked periodically thereafter, these rarely fell below 80%. A similar level of interobserver agreement was obtained by O'Leary and Becker (1968), who ran 6 reliability checks, averaging 82%. O'Leary, Becker, Evans, and Saudargas (1969), studying the effects of a token reinforcement program in a public school, conducted numerous reliability checks throughout the various stages of their data collection and obtained interrater agreement figures ranging from 68 to 100%, and averaging well above 80%. Using a modified version of the Disruptive Behavior Schedule, O'Leary, Kaufman, Kass, and Drabman (1970) achieved comparable levels of interobserver reliability. In each of these cases, reliability was determined for each child observed by dividing the number of agreements between 2 observers by the total number of agreements plus disagreements. An agreement was scored if both raters recorded the same behavior within a given interval. A disagreement was scored if one observer recorded the behavior and the other did not.

Validity: Specific evidence of validity is not reported. However, the instrument has in several studies recorded a reduction in disruptive pupil behaviors following the introduction of behavior modification procedures into the classroom (Becker et al., 1967; O'Leary and Becker, 1968; O'Leary et al., 1969; O'Leary et al., 1970; Thomas, Nielsen, Kuypers, and Becker, 1967).

Norms: Normative data are not available.

Procedures for Use: In the initial study by Becker et al. (1967), coders underwent 4 weeks of training, during which time they learned to unobtrusively observe children in the classroom. Working in pairs, they observed target children for 20 minutes a day, 4 days a week. Using stop watches, which they synchronized every 5 minutes, the raters observed for 20 seconds and then took 10 seconds to record the observed behaviors according to a simple code. All data were reported as percentages of the time intervals in which deviant behavior occurred. Because classroom activities varied a great deal from day to day, weekly rather than daily averages were reported.

Comments: The Disruptive Behavior Schedule provides an economical and reliable method of assessing problem behavior in the classroom. With its restricted focus, this instrument offers a limited number of well defined categories and an uncomplicated coding system, which has consistently produced a high percentage of interobserver agreement.

References: Becker, W. C., C. H. Madsen, Jr., C. R. Arnold, and D. R. Thomas, "The contingent use of teacher attention and praise in reducing classroom behavior problems." *Journal of Special Education*, 1967, 1(3), 287-307.

O'Leary, K. D., and W. C. Becker, "The effects of the intensity of a teacher's reprimands on children's behavior." *Journal of School Psychology*, 1968, 7, 8-11.

O'Leary, K. D., W. C. Becker, M. B. Evans, and R. A. Saudargas, "A token reinforcement program in a public school: A replication and systematic analysis." *Journal of Applied Behavior Analysis*, 1962, 2, 3-13.

O'Leary, K. D., K. F. Kaufman, R. E. Kass, and R. S. Drabman, "The effects of loud and soft reprimands on the behavior of disruptive students." *Exceptional Children*, 1970, 37(2), 145-155.

Thomas, D. A., L. J. Nielsen, D. S. Kuypers, and W. C. Becker, "Social reinforcement and remedial instruction in the elimination of a classroom behavior problem." *Journal of Special Education*, 1967, 2(3), 291-302.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Dodi System (Dodi #12)

AUTHOR: Norman R. Dodi

AUTHOR/PUBLISHER ADDRESS: Florida State University, Tallahassee, Florida

CRITERIA EVALUATED: 13, 16, 17, 19

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

CODING UNITS

NUMBER OF SUBJECTS OBSERVED
☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

☒ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☒ TIME UNIT
☐ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

CATEGORY DIMENSIONS

☒ AFFECTIVE
☒ COGNITIVE
☐ PROCEDURE OR ROUTINE
☐ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☐ TRAINING
☐ EVALUATION

REFERENCE:

Mirrors for Behavior III: An Anthology of Instruments, Anita Simon and E. Gil Boyer, Communications Materials Center, Wyncote, Pennsylvania, 1974, Pages 229-232.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Scale for Rating Effective Teacher Behavior (Effective Teacher #13)

AUTHOR: Dwight E. Beecher
AUTHOR/PUBLISHER ADDRESS: Source in Beecher (1949)

CRITERIA EVALUATED: 7, 10, 17

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED
☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

CODING UNITS

☒ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☒ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

CATEGORY DIMENSIONS

☒ AFFECTIVE
☒ COGNITIVE
☐ PROCEDURE OR ROUTINE
☐ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

OBSERVER(S) REQUIRED

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☐ RESEARCH
☒ TRAINING
☒ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Pages 165-166.

Name: SCALE FOR RATING EFFECTIVE TEACHER BEHAVIOR

Author: Dwight E. Beecher

Type of Measure: Observer rating form

Availability: Beecher, D. E., *The evaluation of teaching: Backgrounds and concepts*. New York: Syracuse University Press, 1949.

Description: The Scale for Rating Effective Teacher Behavior (SRETb) is a 38-item device intended to measure vital aspects of the student/teacher relationship. Scale development began with a review of studies concerning pupil evaluation of teachers. This review produced 6 teacher rating categories: Fairness; Cheerfulness; Sympathetic Understanding; Control; Ability to Stimulate Response; and Knowledge. Under these categories were classified the specific, observable teacher behaviors which, according to the author, most frequently provoke a reaction among high school students. These behaviors are the scale's items. The observer, after rating the teacher on each of these items, may clarify his ratings with anecdotal comments, space for which is provided on the record sheet.

After several preliminary administrations, Beecher decided to leave the scale in its original form. He suggests (1949) that it be used by teachers for self-evaluation and by student teachers for supplemental training information.

Sample Items: Each item on the SRETb describes an observable teacher behavior. If the behavior described is observed, the item is marked with a plus sign; if its opposite is observed, the item is marked with a minus sign. From 5 to 8 items of the following type appear in each category:

Category	Item
Fairness	1. Shows no favorites.
Cheerfulness	2. Is not crabby or cross. Does not nag.
Sympathetic Understanding	3. Always tries to show approval of effort. Encouraging.
Control	4. Maintains good pupil conduct without reprimanding frequently.
Ability to Stimulate Response	5. Elicits responses, enthusiasm from students. Many pupils contribute.
Knowledge	6. Knows subject area well. Can answer students' questions.

Reliability: Beecher (1949) reports 2 reliability coefficients. Interrater agreement between 2 judges of the same teacher was estimated at .79. Also, 2 ratings of the same teacher, taken by the same observer on 2 different occasions, correlated .90.

Validity: Because it was developed directly from research findings related to

pupil/teacher relationships and the variables affecting those relationships, the SRETB can claim some content validity. Evidence of concurrent validity is provided by Beecher (1949), who had a panel of "experts" rate 50 teachers as superior, average, or poor. The same 50 teachers were, at the same time, rated on the SRETB by an observer. Scores on the scale were used to divide the teachers into upper, middle, and lower groups. A contingency coefficient for these data was computed and found to be .72. Beecher, using Yule's Formula, corrected this contingency coefficient to estimate the product-moment correlation between the 2 ratings. The corrected value was .58.

Norms: Norms consist of percentile ranks, divided into 9 deciles, which correspond to computed scores. However, information regarding the number, kind, and location of teachers on which these norms are based is not reported.

Administration and Scoring: Beecher (1949) presents only a page of directions for administering the SRETB. Procedures for training observers are not mentioned, although it seems reasonable to assume that such training would be necessary. Because it takes a good deal of time to rate a single teacher on all 38 items, Beecher suggests that only 25 items be used at a time, thus requiring 2 classroom visits for a complete observation.

Scoring the SRETB involves computing the percentage of items marked positively. Thus, if 38 items are rated, and 34 of these ratings are positive, the teacher's score is $\frac{34}{38} \times 100$, or 89.

Comments: The Scale for Rating Effective Teacher Behavior is a logically developed instrument which can be useful in teacher evaluation or student teacher training. However, its value is limited by poorly defined norms and an absence of instructions for training observers. Furthermore, the "either/or" response format of the SRETB has been questioned (in Buros, 1953) since it allows no room for teacher behavior which falls in between the positive and negative extremes implied in Beecher's items.

References: Beecher, E., *The evaluation of teaching: Backgrounds and concepts*. New York: Syracuse University Press, 1949.

Buros, O. K., *The fourth mental measurements yearbook*. Highland Park, New Jersey: The Gryphon Press, 1953.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Florida Climate and Control System (Florida Climate #14)

AUTHOR: Robert Soar, Ruth Soar, Margorie Ragosta

AUTHOR/PUBLISHER ADDRESS: Institute for Development of Human Resources,
College of Education, University of Florida,
Gainesville, Florida

CRITERIA EVALUATED: 1, 7, 12, 16, 17

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

CODING UNITS

NUMBER OF SUBJECTS OBSERVED
☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN
CLASSROOM

☐ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☐ TIME UNIT
☒ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

CATEGORY DIMENSIONS

☒ AFFECTIVE
☐ COGNITIVE
☐ PROCEDURE OR ROUTINE
☒ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

OBSERVER(S) REQUIRED

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☐ TRAINING
☐ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Pages 451-453.

Name: FLORIDA CLIMATE AND CONTROL SYSTEM

Authors: Robert Soar, Ruth Soar, and Marjorie Ragosta

Type of Measure: Observation coding system

Availability: Soar, R., R. Soar, and M. Ragosta, *Florida climate and control system*. Gainesville, Florida: Institute for the Development of Human Resources, College of Education, University of Florida, 1971.

Description: The Florida Climate and Control System (FLACCS) was developed for use in Project Follow Through (Soar, 1973), a study of the educational needs of disadvantaged children. Derived primarily from the South Carolina Observation Record (Soar, 1966), the Hostility-Affection Schedule (Fowler, 1962), and earlier versions of the Observation Schedule and Record (Medley and Mitzel, 1958), FLACCS was designed to record behavioral dimensions not covered by Interaction Analysis. Among these were classroom groupings, the degree of individual versus group work, the physical movement of teacher and pupils, and the nonverbal expression of affect in the classroom.

After several revisions, FLACCS emerged as a 2-part instrument, the first section of which focuses on the teacher's direction and control of the classroom and the pupils' response to such management. This section includes items describing Teacher Activity, Verbal Control, Nonverbal Control, Pupil Activity, Socialization, Materials, and Pupil Interest/Attention. The second portion of FLACCS assesses expression of negative and positive affect under the following categories: Teacher Verbal; Pupil Verbal; Teacher Nonverbal; and Pupil Nonverbal.

The control and affect sections of FLACCS were separately factored by Soar (1973). Items with the highest factor loadings were jointly analyzed, yielding the following 9 factors.

1. Strong Control
2. Pupil Free Choice vs. No Choice
3. Teacher/Pupil Supportive Behavior
4. Nonverbal Gentle Control
5. Gentle Control
6. Work Without the Teacher
7. Pupil Negative Affect
8. Teacher Attention in a Task Setting
9. Teacher Positive Affect

Sample Items: Most of the behavioral items included on FLACCS are specific, demanding little inference on the observer's part (e.g., "smiles, laughs, nods" under Positive Affect, Teacher Nonverbal). Other items, however, are more general, requiring some interpretation by the observer (e.g., "makes disparaging remark" under Negative Affect, Pupil Verbal).

Reliability: Soar (1973) reports correlations between observations taken at 3 points in time for all 9 FLACCS factors. The first and second observations correlated from $-.16$ to $.77$, the first and third from $.09$ to $.89$ and the second and third from $-.05$ to $.72$, indicating considerable variability in factor stability. Soar reports less variability among observers, presenting indices of interobserver agreement calculated by Hoyt's (1955) analysis of variance formula 5. These ranged from $.77$ to $.99$ and averaged $.92$.

Validity: Intercorrelations among the FLACCS factors, computed by Soar (1973), were generally low, indicating some construct validity. Only 2 were above $.50$ —that between Strong Control and Pupil Negative Affect and that between Pupil Free Choice and Teacher Positive Affect. Further evidence of construct validity is provided by group differences which emerged on the FLACCS. Five of the 9 FLACCS factors showed F ratios which significantly discriminated grade levels. In general, kindergarten differed most often from the other grades, as might be expected. Kindergarten classrooms were characterized on the FLACCS by more Pupil Free Choice and Teacher Gentle Control and less Strong Control, Work Without Teacher, and Teacher Attention in a Task Setting.

Evidence of criterion-related validity is provided by correlations between FLACCS factors and other measures of classroom interaction. For example, the FLACCS factor, Pupil Free Choice, related negatively to Convergent Thinking, as measured on the Teacher Practices Observation Record (TPOR), but positively to the TPOR variables, Pupil Free Choice and Exploration of Ideas. This same FLACCS factor, Pupil Free Choice, also correlated positively with Varied Pupil-Initiated Interaction, measured on the Reciprocal Category System (RCS), and negatively with Drill, also on the RCS. Both of these correlations exceeded $.50$.

Relationships between FLACCS factors and measures of pupil behavior also have bearing on the system's validity. Pupil absences in the upper grade levels correlated positively with Strong Control and negatively with Teacher Positive Affect. In the lower grades, pupil skills gain related positively to Teacher Attention in a Task Setting and negatively to Pupil Free Choice. In general, the expected relationship between teacher expressions of affect and pupil gain did not appear. Instead, pupil gain was associated with the FLACCS dimensions reflecting structuring of classroom activity and pupil involvement with the teacher (Soar, 1973).

Norms: Soar (1973) presents factor means and standard deviations for several elementary grade levels.

Procedures for Use: FLACCS categories are presented on 2 pages, the first reflecting teacher control and pupil reaction, the second, teacher and pupil expression of positive and negative affect. Behaviors are recorded separately on each page. Certain items (such as "Praise") appear on both pages of the instru-

ment. These may be coded once or twice, depending on the use and intent of the item. If a teacher praises a child's work in order to reinforce and encourage him, the item is coded in both the structural and affective areas. If, however, the teacher compliments a child's appearance, a check is placed only on the affective page.

In using the FLACCS, an observer views the classroom for a specified period of time, usually 2 to 5 minutes, and then tallies both pages of the code sheet. Behaviors are recorded only once, even if they recur several times within the brief observation period. This procedure is then repeated. The ratings thus reflect overall impression of the classroom.

Comments: The Florida Climate and Control System offers comprehensive assessment of classroom interaction, requiring little inference on the observer's part. The FLACCS has a strong affective component and is most appropriate for the elementary grades. The somewhat low reliabilities between observations reflect changes in pupil and teacher behaviors over the year and, therefore, should not necessarily be interpreted as a characteristic of the instrument.

References: Fowler, B. D., *Relation of teacher personality characteristics and attitudes to teacher-pupil rapport and emotional climate in the elementary classroom*. Unpublished doctoral dissertation, University of South Carolina, 1962.

Hoyt, C. J., "Relations of certain correlational to variance ratio estimates of test reliability." *Twelfth Yearbook of the National Council of Measurement Used in Education*, 1955, 50-55.

Medley, D. M., and H. E. Mitzel, "A technique for measuring classroom behavior." *Journal of Educational Psychology*, 1958, 49, 86-92.

Soar, R. S., *An integrative approach to classroom learning*. NIMH project 5-R11 MH 01096. Columbia, South Carolina: University of South Carolina, 1966. (ERIC Document Reproduction Service No. ED 033 749).

Soar, R. S., Final report. *Follow Through classroom process measurement and pupil growth (1970-71)*. Gainesville, Florida: Institute for Development of Human Resources, College of Education, University of Florida, 1973.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Fuller Affective Interaction Records 33 (FAIR 33 #15)

AUTHOR: Frances F. Fuller

AUTHOR/PUBLISHER ADDRESS: Research and Development Center for Teacher Education, University of Texas, Austin, Texas

CRITERIA EVALUATED: 7, 14, 17, 19

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

CODING UNITS

NUMBER OF SUBJECTS OBSERVED
☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

☒ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☐ LIVE
☒ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

CATEGORY DIMENSIONS
☒ AFFECTIVE
☐ COGNITIVE
☐ PROCEDURE OR ROUTINE
☐ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☐ RESEARCH
☒ TRAINING
☒ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Pages 454-456.

Name: FULLER AFFECTIVE INTERACTION RECORDS 33

Author: Frances F. Fuller

Type of Measure: Observation coding system

Availability: Fuller, F. F. *FAIR system manual. Fuller Affective Interaction Records*. Austin, Texas: Research and Development Center for Teacher Education, University of Texas, 1969.

Description: The FAIR observation system employs trained coders to assess interpersonal behaviors of preservice teachers and their students in self-contained (single classroom) settings. FAIR 33 is based on 5 interpersonal dimensions. The first of these, *Responsiveness*, includes behaviors which occur in response to another's actions (*R*) or serve to initiate a new action (*I*). The second dimension, *Self-Other*, describes actions directed toward the self (*S*) or toward others (*O*). The third dimension, *Approval*, includes behaviors ranging from approval (*A*), to noncommittal (*N*), to disapproval (*D*), and the fourth, *Inclusion*, describes behaviors ranging from an invitation to respond (*I*) to exclusion of another (*E*). The final dimension, *Control*, is comprised of behaviors which permit (*P*) or restrict (*R*) the responses of others. Combinations of the behaviors within these 5 dimensions produce 14 teacher categories, 14 student categories, and 5 noninteractive categories (Fuller, 1969; Manning, 1972).

Sample Items: The manual presents a series of dialogues illustrating the 33 categories generated from the behaviors included in the 5 dimensions. Sample categories produced from dimension combinations appear below (Fuller, 1969, p. 20):

<i>Dimension Combination</i>	<i>Teacher Category</i>	<i>Student Category</i>
ROAIP (Responds, Other, Approval, Invites, Permits)	Values. Values feelings; identifies; shares. Listens attentively. Unqualified acceptance. Includes laughing or being sad with someone, "I feel that way too." (Person oriented)	Zeal. Student is responsive, participating. Listens attentively. Values or recognizes another's feelings. Waves hand, shows pleasure, appreciation, good mood, laughing with someone. "Oh, Boy!" (Affect)

ROAIR (*Responds, Other, Approval, Invites, Restricts*)

Nurtures. Teacher gives focused encouragement. Guides. Hints. "Come on, Johnny, you know this one." Gives praise, approval to previous behavior. Smiles. Includes recognition of student volunteer, and "Thank you for helping me." (Affect)

Encourages. Encourages teacher or another student to go on. Includes "Thank you for helping me." Gives approval; praises. "You got it right." Includes choosing in a game, election panel.

Reliability: The reliability of mean ratings of two coders is presented in the manual for each FAIR category. Coefficients range from .97 to .00, with an average of .56. Average reliability for teacher codes is .70; average reliability for student codes is .42. For 97% of the data collected, average intercoder agreement is .81 (Fuller, 1969).

Validity: No information on the validity of the FAIR 33 is reported in the manual. However, FAIR 33 categories were constructed from classroom behaviors recorded on sound films and videotapes. These included behaviors which were observed, as well as behaviors which were assumed to exist. For example, teachers were observed praising students, but students were not observed praising teachers. Yet the latter behavior probably occurs, and was therefore included on the FAIR 33. All behaviors observed in 360 films and videotapes have successfully been classified within this category system (Fuller, 1969).

Norms: No normative data are presented.

Procedures for Use: Each time behavior changes, a code is recorded on the FAIR 33. A single behavior may last for 1 second or several minutes. The length of the behavior is recorded according to procedures described in the manual. One coder records the behavior of both teacher and students. It is recommended that a coding desk or flexowriter be used in conjunction with the coding system. The flexowriter produces a punched paper tape which can be easily transferred to magnetic tape for computer processing, thereby permitting large quantities of data to be processed without tallying or keypunching.

Comments: The FAIR 33 categories allow the researcher to view behaviors in relation to one another. The FAIR system offers an efficient means of processing large quantities of observation data. However, because of heavy demands placed on the observers, some mechanical and electronic equipment is needed to eliminate tallying and key punching. FAIR reliabilities are generally high, and the instrument appears to be soundly constructed, although validity data are lacking.

References: Fuller, F. F., *FAIR system manual. Fuller Affective Interaction Records*. Austin, Texas: Research and Development Center for Teacher Education, University of Texas, 1969.

Manning, B. A., *Interpersonal interaction: A selective review*. Austin, Texas: Research and Development Center for Teacher Education, University of Texas, 1972.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Hough System (Hough #16)

AUTHOR: John B. Hough

AUTHOR/PUBLISHER ADDRESS: Ohio State University, Columbus, Ohio

CRITERIA EVALUATED: 8, 9, 16, 17

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED

☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

CODING UNITS

☒ CATEGORY CHANGE
☐ TOPIC CHANGE

☐ SPEAKER CHANGE
☒ TIME UNIT
☐ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

CATEGORY DIMENSIONS

☒ AFFECTIVE
☐ COGNITIVE
☐ PROCEDURE OR ROUTINE
☒ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

OBSERVER(S) REQUIRED

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☒ TRAINING
☐ EVALUATION

REFERENCE:

Mirrors for Behavior III: An Anthology of Instruments, Anita Simon and E. Gil Boyer, Communications Materials Center, Wyncote, Pennsylvania, 1974, Pages 301-304.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Jackson and Lahaderne System (Jackson, Lahaderne #17)

AUTHOR: Phillip W. Jackson and Henriette M. Lahaderne

AUTHOR/PUBLISHER ADDRESS: Source in Jackson and Lahaderne (1967)

CRITERIA EVALUATED: 7, 9, 12, 15, 17

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED

☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

CODING UNITS

☒ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

CATEGORY DIMENSIONS

☒ AFFECTIVE
☐ COGNITIVE
☒ PROCEDURE OR ROUTINE
☒ ACTIVITY
☒ SOCIOLOGICAL STRUCTURE
☐ OTHER

OBSERVER(S) REQUIRED

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☐ TRAINING
☐ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Pages 457-458.

Name: JACKSON AND LAHADERNE OBSERVATION SYSTEM

Authors: Phillip W. Jackson and Henriette M. Lahaderne

Type of Measure: Observation coding system

Availability: This instrument is described in: Jackson, P. W., and H. M. Lahaderne, "Inequalities of teacher-pupil contacts." *Psychology in the Schools*, 1967, 4(3), 204-211.

Description: This observation system was developed by Jackson and Lahaderne (1967) in a study of teacher/pupil interaction in elementary school classrooms. Designed to assess the communication between the teacher and individual students, this instrument requires an observer to sit in the classroom and record the following information for each verbal or nonverbal exchange: (1) the identity of the student involved; (2) the initiator of the message (i.e., teacher or student); and (3) the nature of the communication. Any given communication is classified as primarily Instructional, Managerial, or Prohibitory. Instructional messages refer in some way to curriculum content or educational objectives. Managerial messages, on the other hand, involve the interpretation of classroom rules and the definition of acceptable behavior, while Prohibitory remarks are intended to maintain order or punish misbehavior.

Sample Items: Jackson and Lahaderne (1967) illustrate the classification of several nonverbal behaviors, noting that "the ability to categorize messages that are only partially overheard or that do not entail words is particularly important in elementary classrooms where teachers and students are very mobile and where the occasion for certain messages recurs so frequently that their transmission becomes highly stylized and abbreviated (p. 205)." Thus, they explain that when a student approaches the teacher with an open workbook in his hand, the interaction, though inaudible to the observer, may safely be classified as Instructional. Or, when the teacher snaps his fingers and points to a student, it may be assumed that the message is Prohibitory even though no words are spoken.

The classification of verbal behavior is not similarly exemplified. The authors maintain that observers can usually differentiate the 3 types of communication, though Managerial and Prohibitory messages may sometimes be confused.

Reliability: Reliability data are not reported by Jackson and Lahaderne (1967).

Validity: Though no evidence of criterion-related validity is presented, many of the results which Jackson and Lahaderne obtained using this instrument reveal expected differences and similarities in classroom communication. Data from 4 sixth-grade classes in a relatively homogeneous community indicated a rapid rate of interaction and a preponderance of Instructional exchanges in all of the classrooms. The 4 groups were also quite similar in regard to the initiation of

student/teacher interaction. In each room the teacher controlled the flow of communication, initiating about 80 individual exchanges per hour. Initiation rates for students, however, differed from class to class, and among those rooms with high student initiation rates, the focus of student queries differed.

Further differences emerged with regard to pupil sex, confirming the popular belief that boys are the source of most classroom misbehavior. Though only 44.8 to 58.8% of the children in each class were male, 69.6 to 90.1% of the Prohibitory exchanges involved boys rather than girls. Within each room and within each sex group, however, there remained wide individual differences in teacher/pupil interaction, with 1 or 2 students having fewer than 1 exchange per hour with the teacher and others being in contact with the teacher almost constantly.

Norms: The sample used by Jackson and Lahaderne (1967) was composed of 4 sixth-grade classrooms in 2 schools in a predominantly white, working-class community. Two of the classrooms contained 34 pupils each, and 2 others contained 29 each. Two of the 4 teachers were men and 2 were women.

Procedures for Use: In the Jackson and Lahaderne study (1967), observations were tallied in 20-minute units, 36 of which were recorded for each classroom. These observations, distributed throughout the school week, covered all of the activities of each room. The observation tally sheet required that an entry be made for each transmission of information between the teacher and individual students. Teacher remarks directed at more than 1 student were ignored.

Comments: The primary advantage of the Jackson and Lahaderne Observation System is its simplicity. It allows the observer to record both verbal and nonverbal classroom interaction using relatively few, fairly easily distinguished categories. However, it should be kept in mind that such simplicity may also produce a broad, general picture of classroom communication, which may suffer from lack of detail and depth. This possibility, along with the absence of reliability data, limits this instrument somewhat.

Reference: Jackson, P. W., and H. M. Lahaderne, "Inequalities of teacher-pupil contacts." *Psychology in the Schools*, 1967, 4(3), 204-211.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Joyce System (Joyce #18)

AUTHOR: Bruce R. Joyce

AUTHOR/PUBLISHER ADDRESS: Teachers' College, Columbia University, New York,
New York

CRITERIA EVALUATED: 3, 8, 13, 14, 17, 18, 19

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED

☒ 1 ONLY
☐ MORE THAN 2 PEOPLE IN
CLASSROOM

CODING UNITS

☒ CATEGORY CHANGE
☐ TOPIC CHANGE

☐ SPEAKER CHANGE
☒ TIME UNIT
☐ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

CATEGORY DIMENSIONS

☒ AFFECTIVE
☒ COGNITIVE
☒ PROCEDURE OR ROUTINE
ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

USES REPORTED BY AUTHOR

☒ RESEARCH
☒ TRAINING
☐ EVALUATION

REFERENCE:

Mirrors for Behavior III: An Anthology of Instruments, Anita Simon and E. Gil Boyer,
Communications Materials Center, Wyncote, Pennsylvania, 1974, Pages 337-341.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Kounin System (Kounin #19)

AUTHOR: Jacob S. Kounin

AUTHOR/PUBLISHER ADDRESS: Wayne State University, Detroit, Michigan

CRITERIA EVALUATED: 4, 5, 7, 9

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED

☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

CODING UNITS

☐ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☒ TIME UNIT
☐ TIME SAMPLE
☒ RATING SCALE
☐ OTHER

COLLECTION METHODS

☐ LIVE
☐ LIVE WITH CODING EQUIPMENT
☒ VIDEO AND/OR AUDIO TAPE

CATEGORY DIMENSIONS

☐ AFFECTIVE
☐ COGNITIVE
☒ PROCEDURE OR ROUTINE
☒ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

OBSERVER(S) REQUIRED

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☐ TRAINING
☐ EVALUATION

REFERENCE:

Mirrors for Behavior III: An Anthology of Instruments, Anita Simon and E. Gil Boyer, Communications Materials Center, Wyncote, Pennsylvania, 1974, Pages 343-347.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Kounin, Friesen, and Norton Behavior Coding Procedure (Kounin, Friesen #20)

AUTHOR: Jacob S. Kounin, Wallace V. Friesen, A. Evangeline Norton

AUTHOR/PUBLISHER ADDRESS: Source in Kounin, Friesen, and Norton (1966)

CRITERIA EVALUATED: 4, 5, 7, 9, 11, 14, 17

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED

☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

CODING UNITS

☐ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☒ TIME UNIT
☒ TIME SAMPLE
☒ RATING SCALE
☐ OTHER

COLLECTION METHODS

☐ LIVE
☒ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

CATEGORY DIMENSIONS

☐ AFFECTIVE
☐ COGNITIVE
☐ PROCEDURE OR ROUTINE
☒ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

OBSERVER(S) REQUIRED

☒ 1 PERSON
☒ TEAM OF 2 PERSONS
☒ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☐ TRAINING
☐ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Pages 459-461.

**Name: KOUNIN, FRIESEN, AND NORTON BEHAVIOR CODING
PROCEDURE**

Authors: Jacob S. Kounin, Wallace V. Friesen, and A. Evangeline Norton

Type of Measure: Observation coding system

Availability: Kounin, J. S., W. V. Friesen, and A. E. Norton, "Managing emotionally disturbed children in regular classrooms." *Journal of Educational Psychology*, 1966, 57(1), 1-13.

Description: Developed in a study of the relationship between teaching style and the behavior of emotionally disturbed children in regular elementary classrooms (Kounin, Friesen, and Norton, 1966), this observation system focuses on the pupil's academic activity and the teacher's managerial techniques. In developing codes for teacher style, the authors were guided by several criteria. The categories were required to reflect: (1) concrete behaviors or managerial methods, rather than traits or characteristics; (2) dimensions on which teachers differed; and (3) behaviors which were relatively free of commitment to any philosophical orientation or value system. The teacher categories selected are listed below.

I. Desist Techniques

- A. Clarity
- B. Firmness
- C. Child treatment
 - 1. Negative
 - 2. Neutral
 - 3. Positive
- D. Intensity
- E. Focus
 - 1. Misbehavior
 - 2. Task
- F. Overlappingness
- G. With-it-ness
- H. Degree of success (coded on a 7-point scale)

II. Transition Incidents

- A. Behavior mode of children at time of transition
- B. Delineation
 - 1. Simple
 - 2. With clarity
 - 3. With group alerting
 - 4. With challenge/arousal
 - 5. With zest
- C. Attention property of the signal

- D. Presence of anti-resolution properties
- E. Appropriateness of timing
- F. Children's immediate reaction

The categories of pupil behavior selected for observation apply only to the child's academic activity. These categories, listed below, produce 2 indices of student behavior: Work Involvement rate and Deviancy rate.

- I. Definitely and completely involved in work
- II. Probably involved in work
- III. Definitely not involved in work
- IV. Restless
- V. Languishing
- VI. Languishing and restless
- VII. Engaged in task-related deviancy
- VIII. Engaged in non-task-related deviancy
 - A. Mild
 - B. Serious
- IX. Contagion of deviancy

Sample Items: Kounin et al. (1966) define the categories included on this system and list behaviors typically coded under each. For example, "With-it-ness" refers to the extent to which the teacher communicates to the pupils that he knows what is happening in the classroom. A teacher indicates that he is not "with-it" when he acts upon a deviancy too late, or when he attends to a minor disturbance while a major deviancy is occurring behind his back.

Reliability: For the pupil behavior categories, interrater agreement between various pairs of 4 observers ranged from 82 to 96% and averaged 92%. The teacher behavior category, Degree of Success, produced an average of 74% agreement among observers, while the remaining teacher Desist categories yielded inter-coder agreement averaging 90% (Kounin et al., 1966).

Validity: Evidence for validity is based on findings of Kounin et al. (1966), who used this system to observe emotionally disturbed and nondisturbed children in a variety of classroom subsettings. They obtained group differences and category intercorrelations which were almost all in expected directions. For example, in all classroom subsettings, nondisturbed children received higher work involvement and lower deviancy scores than disturbed children. The behavior of all children, however, varied with classroom subsetting, the highest degree of school-appropriate behavior occurring in subgroup recitation periods and the lowest occurring during seatwork situations. In all settings, the amount of school-appropriate behavior manifested by nondisturbed children was positively related to that exhibited by disturbed children.

Correlations between observation categories were, for the most part predicted by the authors. Although Overlappingness (the extent to which the

teacher attends to 2 aspects of the classroom at once) was not significantly associated with Deviancy or Work Involvement for either group of children, it was related to With-it-ness ($r = .50, p < .01$). The more with-it the teacher, the more work-involved and less deviant were the pupils. Teacher behavior during transition periods (in which the children were guided from one activity to another) also correlated with the Work Involvement and Deviancy rates of pupils: high antiresolution scores during these periods were associated with a decline in school-appropriate behavior.

Norms: The authors report mean Work Involvement and Deviancy scores for varying numbers of emotionally disturbed and nondisturbed children in regular elementary classrooms. Figures are provided for four classroom subsettings: (1) subgroup recitation; (2) class recitation; (3) seatwork in teacher's sphere; and (4) seatwork outside teacher's sphere. Normative data are not reported for the categories of teacher behavior (Kounin et al., 1966).

Procedures for Use: In the study by Kounin et al. (1966), classroom behavior was videotaped for entire mornings or afternoons. Observers categorized this behavior from tapes, treating each of the 4 subsettings separately and coding only academic activities. Observed behaviors were tallied in 10-second intervals. The mean percentage of intervals containing a tally for a particular behavior constituted the score for that behavior.

Comments: Although published information regarding this observation system is limited, the Kounin, Friesen, and Norton Behavior Coding Procedure appears to be a useful tool for those researchers who prefer to focus on concrete techniques of classroom management rather than on teacher personality characteristics. It has demonstrated adequate interobserver agreement and preliminary evidence of validity.

Reference: Kounin, J. S., W. V. Friesen, and A. E. Norton, "Managing emotionally disturbed children in regular classrooms." *Journal of Educational Psychology*, 1966, 57(1), 1-13.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: MacDonald-Zaret System (MacDonald-Zaret #21)

AUTHOR: James B. MacDonald, Esther Zaret

AUTHOR/PUBLISHER ADDRESS: J. B. MacDonald, University of Wisconsin, Milwaukee,
Wisconsin

CRITERIA EVALUATED: 3, 8, 14, 16, 17, 19

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED

☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN
CLASSROOM

CODING UNITS

☒ CATEGORY CHANGE
☐ TOPIC CHANGE
☒ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☐ LIVE
☐ LIVE WITH CODING EQUIPMENT
☒ VIDEO AND/OR AUDIO TAPE

CATEGORY DIMENSIONS

☒ AFFECTIVE
☐ COGNITIVE
☐ PROCEDURE OR ROUTINE
☐ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

OBSERVER(S) REQUIRED

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☐ TRAINING
☐ EVALUATION

REFERENCE:

Mirrors for Behavior III: An Anthology of Instruments, Anita Simon and E. Gil Boyer,
Communications Materials Center, Wyncote, Pennsylvania, 1974, Pages 371-374.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Observation Procedure for Assessing the Microenvironments of Individual Preschool Children (Microenvironments #22)

AUTHOR: John Dopyera

AUTHOR/PUBLISHER ADDRESS: Dopyera (1969) Available from: William J. Meyer, Director, Syracuse University, Early Childhood Education Center, 340 Huntingdon Hall, 150 Marshall St., Syracuse, NY 13210

CRITERIA EVALUATED: 7, 9, 16, 17

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

CODING UNITS

NUMBER OF SUBJECTS OBSERVED
☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

☐ CATEGORY CHANGE
☐ TOPIC CHANGE

☐ SPEAKER CHANGE
☐ TIME UNIT
☒ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

CATEGORY DIMENSIONS

☐ AFFECTIVE
☐ COGNITIVE
☐ PROCEDURE OR ROUTINE
☒ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☐ TRAINING
☒ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Pages 467-468.

Name: OBSERVATION PROCEDURE FOR ASSESSING THE MICRO-ENVIRONMENTS OF INDIVIDUAL PRESCHOOL CHILDREN

Author: John Dopyera

Type of Measure: Observation coding system

Availability: Dopyera, J. *Assessing the micro-environments of individual preschool children*. Syracuse, New York: Head Start Evaluation Project, Syracuse University, 1969. This report may be obtained from William J. Meyer, Director, Syracuse University Early Childhood Education Center, 340 Huntington Hall, 150 Marshall Street, Syracuse, New York 13210.

Description: This observation procedure was developed in an evaluation of compensatory preschool programs to assess the micro-environments of children. The term "micro-environment" was used to describe (1) events in the child's immediate environment which were sensorily accessible to him or her and (2) other setting phenomena which served as a medium for the child's behavior. These events and phenomena were recorded in two 2-minute observations, the first of which concentrated on the following aspects of each child's behavior or environment:

1. Physical location and posture;
2. Focus and coordination;
3. Physical environments encountered (i.e., toys, people, equipment);
4. Affective verbal or vocal behavior;
5. Affective verbal or vocal behavior of other children in the immediate vicinity;
6. Interpersonal verbal and nonverbal encounters between the child and any adult or any other child;
7. Conditions which might affect the accuracy of observations;
8. Behavioral indicators of the child.

A second 2-minute observation provided the following information:

1. Context of the child's behavior;
2. The child's activity;
3. The group's activity;
4. Codes for child, peer, teacher, aide, or other adult activity;
5. Minimum distances between the child and others;
6. Sanctions given by adults to the target child or the other children.

Dopyera (1969) reduced data derived from the above categories to 33 variables representing 7 factors, 5 of which were interpretable. These 5 were labeled: Adult Directed and Highly Controlled Small Group Activities; Diffuse Activity

Structure; Undisrupted Independent Effort; Adult Tolerated Nonsettled Behavior; and Subject-Directed Striving.

Sample Items: Dopyera (1969) provides examples of the kinds of behaviors and environmental characteristics coded under each category on the system. "Behavioral indicators," for example, includes exaggerated gait, tics, and other physical idiosyncrasies of the child.

Reliability: Interrater reliabilities were computed for each of the observational items included in the factor analysis. These averaged .56, .59, .59, and .58 for 3 pairs of observers and for all 6 observers combined, respectively.

Validity: Dopyera (1969) related factor scores to a number of criteria. He found that Adult Directed and Highly Controlled Small Group Activities correlated negatively with posttest Stanford-Binet mental age scores. Factor III, Undisrupted Independent Effort, was negatively related to the amount of time the child required to complete the Caldwell Preschool Inventory and the Animal House subtest of the Wechsler Preschool and Primary Scale of Intelligence. Similarly, Factor IV, Adult-Tolerated Nonsettled Behavior, was negatively associated with mental age change. A positive relationship emerged between Factor IV, Subject-Directed Striving, and posttest mental age and Animal House scores.

Norms: The sample used by Dopyera (1969) was drawn from Head Start classes in upstate New York during 1969-70. It included 68 children (males and females, blacks and whites) from 10 different classes.

Procedures for Use: In the study reported by Dopyera, raters observed the children for two 2-minute periods and recorded their observations immediately afterward. Their task was simply to indicate the occurrence or absence of specified events. Generally, 25 to 30 observations were recorded for each half-day session.

These records were date-time coded and transferred to tally sheets for data reduction. This involved converting the data to proportions to adjust for variations in the number of observations made. Proportion of item occurrence, or base rate, then, was the unit of analysis used.

Comments: Although reliabilities are somewhat low and two factors are uninterpretable, this observation procedure has several theoretical and practical advantages. Because it allows the researcher to record the child's actual encounters, this system is free from the assumption that the classroom environment is the same for all children. Information about the environmental factors confining or supporting each child's behavior is particularly valuable for purposes of program evaluation. Furthermore, the system can be used in almost any setting by minimally trained and relatively inexperienced observers.

Reference: Dopyera, J., *Assessing the micro-environments of individual preschool children*. Syracuse, New York: Head Start Evaluation Project, Syracuse University, 1969.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Miller-Hughes System (Miller-Hughes #23)

AUTHOR: George L. Miller, Marie Hughes

AUTHOR/PUBLISHER ADDRESS: G. L. Miller, Lesley College, Cambridge, Massachusetts

CRITERIA EVALUATED: 1, 3, 8, 14, 16, 17

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☒ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

CODING UNITS

NUMBER OF SUBJECTS OBSERVED
☒ 1 ONLY
☐ MORE THAN 2 PEOPLE IN CLASSROOM

☒ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☐ LIVE
☐ LIVE WITH CODING EQUIPMENT
☒ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

CATEGORY DIMENSIONS

☒ AFFECTIVE
☒ COGNITIVE
☐ PROCEDURE OR ROUTINE
☐ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☒ TRAINING
☐ EVALUATION

REFERENCE:

Mirrors for Behavior III: An Anthology of Instruments, Anita Simon and E. Gil Boyer, Communications Materials Center, Wyncote, Pennsylvania, 1974, Pages 417-419.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Miniaturized Total Interaction Analysis System (Mini Total Interact #24)

AUTHOR: Herbert K. Heger
AUTHOR/PUBLISHER ADDRESS:

University of Kentucky, Lexington, Kentucky

CRITERIA EVALUATED: 7, 8, 10, 13, 15, 16

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED

☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

CODING UNITS

☒ CATEGORY CHANGE
☐ TOPIC CHANGE

☐ SPEAKER CHANGE
☒ TIME UNIT
☐ TIME SAMPLE
☒ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

CATEGORY DIMENSIONS

☒ AFFECTIVE
☐ COGNITIVE
☐ PROCEDURE OR ROUTINE
☐ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

OBSERVER(S) REQUIRED

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☐ TRAINING
☐ EVALUATION

REFERENCE:

Mirrors for Behavior III: An Anthology of Instruments, Anita Simon and E. Gil Boyer, Communications Materials Center, Wyncote, Pennsylvania, 1974, Pages 261-263.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Modified Category System (Modified Category #25)

AUTHOR: Edmund J. Amidon
AUTHOR/PUBLISHER ADDRESS:

CRITERIA EVALUATED: 8, 17, 19

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED

☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN
CLASSROOM

CODING UNITS

☒ CATEGORY CHANGE
☐ TOPIC CHANGE

☐ SPEAKER CHANGE
☒ TIME UNIT
☐ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

CATEGORY DIMENSIONS

☒ AFFECTIVE
☒ COGNITIVE
☐ PROCEDURE OR ROUTINE
☐ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

OBSERVER(S) REQUIRED

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☒ TRAINING
☐ EVALUATION

REFERENCE:

Mirrors for Behavior III: An Anthology of Instruments, Anita Simon and E. Gil Boyer,
Communications Materials Center, Wyncote, Pennsylvania, 1974, Pages 121-123.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Nonverbal Interaction Analysis (Nonverbal Interaction #26)

AUTHOR: Peggy Amidon

AUTHOR/PUBLISHER ADDRESS: Paul S. Amidon and Associates, Minneapolis,
Minnesota

CRITERIA EVALUATED: 9, 13, 16, 17, 19

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED

☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN
CLASSROOM

CODING UNITS

☒ CATEGORY CHANGE
☐ TOPIC CHANGE

☒ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☒ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

CATEGORY DIMENSIONS

☒ AFFECTIVE
☒ COGNITIVE
☐ PROCEDURE OR ROUTINE
☒ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☐ TRAINING
☐ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borch and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Page 464-466.

Name: NONVERBAL INTERACTION ANALYSIS

Author: Peggy Amidon

Type of Measure: Observation coding system

Availability: Amidon, P., *Nonverbal interaction analysis*. Minneapolis, Minnesota: Paul S. Amidon and Associates, 1971.

Description: Nonverbal Interaction Analysis (NVIA) provides a method of systematically observing and recording nonverbal behavior in the classroom. Designed to parallel the categories of verbal behavior in Flanders' Interaction Analysis (and capable of accommodating the 30 expanded IA categories), NVIA codes the following classroom dimensions, each of which affects teacher/pupil interaction.

- I. Room Arrangement
- II. Materials
- III. Nonverbal Behaviors
- IV. Activities

The first and second dimensions involve classroom setting—the physical arrangement of desks, chairs, bulletin boards, etc., and the presence or absence of certain materials, supplies, and equipment. The third dimension is concerned with the teacher's nonverbal behavior—gestures, facial expressions, posture, and so forth. The fourth dimension combines the previous 3 by focusing on the use of materials, by the teacher and the pupils, in conjunction with nonverbal behaviors.

Sample Items: Specific aspects of each NVIA dimension are coded pictorially. For example, under Dimension I (Room Arrangement) the chalkboard is symbolized by the following figure: . Or, under Dimension II (Materials and Supplies), printed items, such as textbooks, workbooks, and newspapers, are represented by the symbol, . These symbols are further specified by the 10 numerical codes used in Interaction Analysis: (1) Accepts Feeling; (2) Praises or Encourages; (3) Accepts Student Ideas; (4) Asks Questions; (5) Lecturing; (6) Giving Directions; (7) Criticizing or Justifying Authority; (8) Student Talk—Response; (9) Student Talk—Initiation; (10) Silence or Confusion. By combining symbols from Dimensions I and II with Interaction Analysis category numbers, the *contents* of furniture or material may be described, as illustrated below.

-  symbolizes a chalkboard containing questions.
-  symbolizes a chalkboard containing lecture-type information.
-  symbolizes printed material containing directions or instructions.

 symbolizes printed material written by the student in response to an assignment or request made by the teacher (e.g., an essay or written answers to questions).

If a more precise description of content is desired, the Dimension I and Dimension II symbols can be combined with an *expanded* Interaction Analysis category number and code letter:

 symbolizes printed material containing convergent-type questions.

Items on the NVIA Dimensions III and IV are also coded using combinations of symbols and Interaction Analysis categories. For example, on Dimension III (Nonverbal Behaviors), use of the hands to give directions is indicated by the following figure: . Recording items on Dimension IV (Activities) is a bit more complex, since this aspect incorporates symbols from all of the preceding dimensions and distinguishes verbal from nonverbal use of material. Thus,

5  represents the verbal use of a book during a lecture, while

 represents the use of a gesture to hold a book.

Reliability, Validity, and Norms: The NVIA manual (Amidon, 1971) reports no reliability, validity, or normative data.

Procedures for Use: Data collected on Dimensions I and II of the NVIA are recorded *prior* to observing the actual teacher/pupil interaction. The physical arrangement of the classroom and the materials present can be coded before class starts. Items on Dimensions III and IV, however, are sequentially recorded *during* classroom interaction. Immediate (live), delayed (videotaped), or a combination of immediate and delayed observation may be used. It is generally recommended that behaviors be recorded in 3-second units over a 20-minute observation period, though these specifications may be modified to accommodate unusual circumstances related to class size, students' ability, and classroom setting. Such circumstances, along with the purposes of observation, also determine the number of coders employed per classroom or per videotape. All or as few as 1 of the NVIA dimensions can be recorded—with or without the Interaction Analysis and expanded Interaction Analysis categories—depending on the user's needs and objectives.

Amidon (1971) explains NVIA recording procedures in great detail, illustrating the coding symbols for each dimension and their modification by Interaction Analysis and expanded Interaction Analysis categories. Practice exercises are also provided for prospective coders.

Comments: Because it incorporates Flanders' Interaction Analysis categories, Nonverbal Interaction Analysis is capable of providing a complete picture of classroom activity (both verbal and nonverbal). Yet it may also be used to assess only one or a few dimensions of teacher/student interaction. The NVIA is

adaptable to a number of situations and purposes and offers varying levels of specificity. The manual is very thorough in describing procedures for using the system. Although psychometric data are not reported, the NVIA, admittedly in an "infant stage," is based on an already researched and widely used observation instrument.

Reference: Amidon, P. *Nonverbal interaction analysis*. Minneapolis, Minnesota: Paul S. Amidon and Associates, 1971.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Observation Schedule and Record Form No. 4 (OSCAR 4V) (OSCAR 4V #27)

AUTHOR: Donald M. Medley
AUTHOR/PUBLISHER ADDRESS: Educational Testing Service, Princeton, New Jersey

CRITERIA EVALUATED: 8, 12, 16, 17, 19

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED
☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

CODING UNITS

☒ CATEGORY CHANGE
☐ TOPIC CHANGE
☒ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

CATEGORY DIMENSIONS

☒ AFFECTIVE
☒ COGNITIVE
☒ PROCEDURE OR ROUTINE
☐ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

USES REPORTED BY AUTHOR

☒ RESEARCH
☐ TRAINING
☐ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Page 156-157.

Name: OBSERVATION SCHEDULE AND RECORD FORM No. 4
(OScAR 4V)

Authors: Donald M. Medley, J. T. Impellitteri, and L. H. Smith

Type of Measure: Observation coding system

Availability: Dr. D. M. Medley, Chairman, Department of Research Methodology, Ruffner Hall, University of Virginia, Charlottesville, Virginia 22903.

Description: OScAR 4V is a system for classifying teacher verbal behaviors observed in the classroom. The focus of this recording system is on the teacher rather than the student. Content of teacher verbal behaviors is coded, while student verbalizations are merely tallied. OScAR 4V is primarily a research tool, consisting of 50 interrelated categories which are presented in flow-chart form. The flow chart guides the observer in classifying teacher statements. Tallies are placed on a separate recording form which contains all end points represented on the flow chart.

Sample Items: OScAR 4V codes classroom behavior under 3 major categories: (1) Teacher Statements; (2) Substantive Interchanges (teacher/student interaction focused on lesson content); and (3) Non-Substantive Interchanges (teacher/student interaction involving subjects other than lesson content). Each of these categories is further subdivided so that behaviors may be more specifically identified. Teacher Statements, for example, subsumes the following codes:

Teacher Statements

- | | | |
|----------------------|---------------------|------------------------------|
| I. Affective | II. Procedural | III. Substantive |
| A. Considering (CSN) | A. Directing (DRC) | A. Informing (INF) |
| B. Rebuking (RBK) | B. Describing (DSC) | B. Problem Structuring (PRB) |

Additional categories are used to indicate whether a verbalization is an Initial Statement (I) or a Continuing (C) remark.

Reliability: Reliability estimates are provided in a study described by Medley and Hill (undated), based on a sample of 72 intern teachers who were observed on OScAR 4V by 6 university supervisors. A reliability coefficient was calculated from an analysis of variance design for each OScAR 4V frequency count and contrast score. (A raw OScAR record is comprised of 42 frequency counts, while a scored record consists of 42 contrast scores, which are linear functions of these frequencies.) Estimated stability coefficients for contrast scores ranged from .00 to .85, with a median of .59. The range for frequencies was .00 to .84, with a median of .50. In general, the categories which proved least reliable were those with low frequencies, suggesting that instability may have been caused by the fact that certain behaviors were rarely observed.

Validity: No data indicating validity could be found. However, the flow chart which serves as a framework for OScAR 4V suggests logical category construction.

Norms: No normative data are available.

Procedures for Use: OScAR 4V requires no special equipment and can be easily learned. The observer uses the flow chart in categorizing classroom verbalizations. For example, in classifying a Teacher Statement, the observer refers to the flow chart, which asks if the statement called for a response. If the answer is no, the flow chart then asks if the statement had affective content. If the answer is no, the observer is guided to the next cell which asks if the statement had substantive content. If the answer is yes, the observer asks if it was a problem structuring statement. If so, he then determines whether it was an initiating or continuing remark.

Behaviors are tallied as they occur on the form provided. For research purposes, the observation period usually lasts between 5 and 10 minutes. However, there is no set time limit. Because only teacher verbalizations are coded for content, the observer's task is not difficult.

Comments: The OScAR 4V is a sophisticated instrument which is easy to use. It requires only 1 person to collect and code data. However, because validity information is unavailable, it is difficult to determine whether this system actually measures what it intends to measure. Nevertheless, OScAR 4V is a well organized and widely used instrument.

References: Medley, D. M., and R. A. Hill, *Measurement properties of Observation Schedule and Record, Form 4V*, undated. (mimeo)

Simon, A., and E. G. Boyer, *Mirrors for behavior. An anthology of observation instruments. Volume 3*. Philadelphia: Research for Better Schools, 1970.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Provo Code for the Analysis of Teaching (Provo Code #28)

AUTHOR: Marie Hughes

AUTHOR/PUBLISHER ADDRESS: University of Arizona, Tucson, Arizona

CRITERIA EVALUATED: 1, 3, 8, 17

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

CODING UNITS

NUMBER OF SUBJECTS OBSERVED

☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

☒ CATEGORY CHANGE
☐ TOPIC CHANGE

☐ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☐ LIVE
☐ LIVE WITH CODING EQUIPMENT
☒ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

CATEGORY DIMENSIONS

☒ AFFECTIVE
☐ COGNITIVE
☒ PROCEDURE OR ROUTINE
☒ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

☐ 1 PERSON
☒ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☒ TRAINING
☐ EVALUATION

REFERENCE:

Mirrors for Behavior III: An Anthology of Instruments, Anita Simon and E. Gil Boyer, Communications Materials Center, Wyncote, Pennsylvania, 1974, Pages 305-308.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Pupil-Teacher Rapport Scale (Pupil-Teacher Rapport #29)

AUTHOR: J. Wayne Wrightstone

AUTHOR/PUBLISHER ADDRESS: Source in Wrightstone (1951)

CRITERIA EVALUATED: 9, 12, 16, 17

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED

☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

CODING UNITS

☐ CATEGORY CHANGE
☐ TOPIC CHANGE

☐ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☒ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

CATEGORY DIMENSIONS

☒ AFFECTIVE
☐ COGNITIVE
☐ PROCEDURE OR ROUTINE
☒ ACTIVITY
☒ SOCIOLOGICAL STRUCTURE
☐ OTHER

USES REPORTED BY AUTHOR

☒ RESEARCH
☐ TRAINING
☐ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Pages 472-473.

Name: PUPIL-TEACHER RAPPORT SCALE

Author: J. Wayne Wrightstone

Type of Measure: Observation rating scale

Availability: Wrightstone, J. W., "Measuring the social climate of a classroom." *Journal of Educational Research*, 1951, 44, 341-351.

Description: Wrightstone (1951) developed the Pupil-Teacher Rapport Scale in an attempt to measure the social climate of classrooms. Assuming that he could economically obtain an estimate of classroom atmosphere by observing and rating important components of pupil-teacher rapport, Wrightstone constructed a scale incorporating the following categories: Pupil-Teacher Interaction Pattern; Degree of Social Interaction; Quality of Social Interaction; Interest; Enjoyment; Role Structure; Emotion of Teacher; Teacher Orders or Suggestions; Physical Tension of Group; and Emotional Tone of Pupil Group.

The scale appears to be appropriate for use in either elementary or secondary classrooms.

Sample Items: An observer rates the classroom according to each of the categories listed above, using a 3-, 4-, or 5-point scale similar to the following:

<i>Category</i>	<i>Rating Scale</i>
Enjoyment	1. No pleasure—signs of displeasure or aversion. 2. Little pleasure—minimal enjoyment. 3. Some pleasure—a few signs of enjoyment. 4. Moderate pleasure—generally restrained, occasionally active enjoyment. 5. Extreme pleasure—enthusiasm.
Teacher Orders or Suggestions	1. Teacher demands compliance. 2. Teacher expects compliance. 3. Teacher generally suggests rather than coerces. 4. Teacher allows options, commanding only in emergencies.

Reliability: Two estimates of interrater agreement are provided by Wrightstone (1951). Trained observers who had used the scale for 5 to 10 observations made independent ratings of the same classroom and achieved 90% agreement on item ratings. In addition, total scores given to 25 teachers by 2 independent observers correlated .92.

Validity: In order to test the validity of the scale, supervisors were asked to make detailed, anecdotal notes, over a period of months, describing the rapport between the teacher and the children in 25 classrooms. These supervisory reports covered the same general categories as those on the observation scale. Both quantitative and qualitative analyses were made, comparing the data provided

by supervisors to that obtained on the rating scale. These comparisons convinced Wrightstone (1951) that the scale had a "high degree of correspondence (p. 435)" with the anecdotal records.

Norms: No normative data are provided by Wrightstone (1951).

Procedures for Use: In using the scale, the observer visits the classroom on several occasions. The rating form provides space for 3 different ratings to be completed on 3 separate occasions. Identification data (name of teacher, school, class or grade, number of pupils, date, name of observer, length of observation, topic of class activity, and group structure) are recorded prior to observation. The rater then checks the items on the scale which best describe the social climate of the classroom.

Comments: The assumption underlying the Pupil-Teacher Rapport Scale—that the degree of compatibility between the teacher and his pupils is an indicator of social climate in the classroom—appears to be sound. Evidence of reliability and validity is positive, though limited, and the observational categories represented on the scale cover the major aspects of classroom interaction. This instrument does, however, require a high degree of inference on the rater's part and therefore requires extensive training of observers to insure that they are interpreting behavioral categories and observed behaviors similarly.

References: Wrightstone, J. W., "Measuring the social climate of a classroom." *Journal of Educational Research*, 1951, 44, 341-351.

Wrightstone, J. W., J. Justman, and I. Robbins, *Evaluation in modern education*. New York: American Book Co., 1956.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Performance Assessment Record for Teachers (PART #30)

AUTHOR: Bob Burton Brown

AUTHOR/PUBLISHER ADDRESS:

Institute for the Development of Human Resources,
College of Education, University of Florida,
Gainesville, Florida

CRITERIA EVALUATED:

13, 14(?), 16(?), 17(?), 18(?), 19(?)

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED

☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN
CLASSROOM

CODING UNITS

☐ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☐ TIME UNIT
☒ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☐ LIVE
☐ LIVE WITH CODING EQUIPMENT
☒ VIDEO AND/OR AUDIO TAPE

CATEGORY DIMENSIONS

☒ AFFECTIVE
☒ COGNITIVE
☐ PROCEDURE OR ROUTINE
☒ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

OBSERVER(S) REQUIRED

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☐ RESEARCH
☒ TRAINING
☒ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Page 158-159.

Name: PERFORMANCE ASSESSMENT RECORD FOR TEACHERS

Author: Bob Burton Brown

Type of Measure: Observation coding system

Availability: Brown, B. B. *Performance assessment record for teachers*. Gainesville, Florida: Institute for Development of Human Resources, College of Education, University of Florida, 1970.

Description: The Performance Assessment Record for Teachers (PART) provides a framework for systematically observing, describing, and assessing the classroom performance of teachers and pupils. Though this instrument codes a number of pupil behaviors, it is designed primarily for teacher self-assessment. Audio or video tape recordings or live observation of classroom performance may serve as the basis of this assessment.

PART consists of 22 items which describe what does and does not happen in classrooms. The observer records the presence or absence of a given behavior during a brief (usually 6-minute) working period, without indicating the number of times it may have occurred. PART items are drawn from several other observation instruments. The first 4 are borrowed from the Teacher Practices Observation Record, which measures the extent to which classroom activity promotes inquiry or reflective thinking. Items 5 through 15 are adapted from the Florida Taxonomy of Cognitive Behavior, which assesses the level of cognitive operations overtly used by pupils in the classroom. Items 16 through 19, extracted from the Taxonomy of Affective Behavior, represent higher affective processes, particularly valuing. The remaining 3 items, drawn from the research of Soar (1970), deal with classroom control. Brown (1970) points out that these 22 items represent only a limited cross section of several alternative approaches to the analysis of teaching/learning situations in the classroom. PART items are not intended to represent universally "good" or "bad" behaviors. They should be used only as a means of gaining insight into classroom processes and effective teaching procedures.

Sample Items: The 22 PART items include teacher and pupil behaviors of the following type:

1. Teacher initiates a learning activity focusing on a question or problem which is of real concern to the student.
2. Teacher initiates a learning activity which addresses a question or problem arising from textbook or class discussion.
3. Student interprets, explains, tells why, compares, or points out causal relationships.
4. Student alters judgment in light of new information.

Brown (1970) lists specific statements or behaviors which indicate the occurrence of each item. For example, item 3, above, is coded when the student makes a statement similar to any of the following:

- a. A campfire goes out when you cover it with dirt because fire needs oxygen in order to burn.
- b. These 3 words sound alike, but they are spelled differently.
- c. The plants on the window sill are dead because the window was left open last night and the temperature fell below freezing.

Reliability, Validity, and Norms: Because PART items were extracted from several other observation systems, no reliability, validity, or normative data are provided by Brown (1970).

Procedures for Use: Brown (1970) gives clear instructions for recording observations. Each 30-minute observation period is composed of 5 separate 7-minute working intervals, each of which corresponds to one of 5 columns on the coding sheet. During working period 1, the rater places a check in column 1 alongside the behavior observed. This procedure is repeated for each of the 6-minute working periods. When the entire observation is over, the number of checks recorded in columns 1 through 5 are totalled for each item. Therefore, the score for each item reflects frequency of occurrence.

Comments: The Performance Assessment Record for Teachers offers a method of evaluating teachers on an everyday basis. According to the author, this test is not intended for research purposes, but instead for use in the field as a self-assessment tool. Although PART covers limited content, such a restriction is necessary in an instrument designed for practical use by teachers. The absence of psychometric information, however, does weaken this measure in spite of the fact that its items are drawn from other, established observation systems.

References: Brown, B. B., *The experimental mind in education*. New York: Harper & Row, 1968.

Brown, B. B., *Instructional guide for the Performance Assessment Record for Teachers (PART)*. Gainesville, Florida: Institute for Development of Human Resources, College of Education, University of Florida, 1970.

Soar, R. S., *Interim report, evaluation of Follow-Through model implementation*. Gainesville, Florida: Institute for Development of Human Resources, College of Education, University of Florida, 1970.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Revised Verbal Interaction Category System-Science (Rev. Verb. Interact. #31)

AUTHOR: Elizabeth Hunter
AUTHOR/PUBLISHER ADDRESS:

Hunter College, New York, New York

CRITERIA EVALUATED: 8, 16, 17, 19

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED

☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

CODING UNITS

☒ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

CATEGORY DIMENSIONS

☒ AFFECTIVE
☐ COGNITIVE
☒ PROCEDURE OR ROUTINE
☒ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

OBSERVER(S) REQUIRED

☐ 1 PERSON
☒ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☒ TRAINING
☐ EVALUATION

REFERENCE:

Mirrors for Behavior III: An Anthology of Instruments, Anita Simon and E. Gil Boyer, Communications Materials Center, Wyncote, Pennsylvania, 1974, Pages 309-312.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Social Weather Rating Scales (Social Weather #32)

AUTHOR: James E. Simpson

AUTHOR/PUBLISHER ADDRESS: Source in Simpson (1963)

CRITERIA EVALUATED: 12, 14, 16, 17

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

CODING UNITS

NUMBER OF SUBJECTS OBSERVED
☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

☐ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☒ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

CATEGORY DIMENSIONS

☒ AFFECTIVE
☐ COGNITIVE
☐ PROCEDURE OR ROUTINE
☐ ACTIVITY
☒ SOCIOLOGICAL STRUCTURE
☐ OTHER

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☐ TRAINING
☐ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Page 480-481.

Name: THE SOCIAL WEATHER RATING SCALES

Author: James E. Simpson

Type of Measure: Observer rating scale

Availability: Simpson, J. E., "A method of measuring the social weather of children," in R. G. Barker (ed.), *The stream of behavior*. New York: Appleton-Century-Crofts, 1963.

Description: The Social Weather Rating Scales were designed to measure "social weather," that is, "the over-all social treatment given a particular individual in a behavior setting (Simpson, 1963, p. 219)." Based in part on the Fels Parent Behavior Rating Scales, this instrument assesses 9 specific factors which may be grouped to form 3 general dimensions of social weather. Each dimension and its component scales are listed below:

<i>Dimension</i>	<i>Scales</i>
1. Warmth (emotional tone of social weather)	1. Acceptance 2. Affectionateness 3. Approval
2. Tendence (direct efforts made for the child)	1. Attention 2. Assistance 3. Communication
3. Indulgence (the freedom allowed the child)	1. Adaptation 2. Privilege 3. Choice

The scales may be used to assess an individual child's treatment by the group, the teacher's behavior toward children, or, combining the ratings of individual children, to obtain an aggregate picture of group atmosphere.

Sample Items: Each bipolar scale is arranged vertically and punctuated by 5 objectives, which become progressively negative. The child's rating is indicated by checking the appropriate spot on the scale. Following each adjective is a brief definition, clarifying for the rater the conditions which warrant a check mark at that particular point on the scale. The Choice scale, for example, is similar to that below.

CHOICE: the freedom of choice or option allowed the child.

	- <i>Free:</i> Few or no attempts to make choices for the child.
	- <i>Liberal:</i> The child's choices are controlled occasionally, sporadically, or superficially.
	- <i>Limited:</i> The child is given some choice or offered alternatives that are indirectly coercive.
	- <i>Controlled:</i> Compliance is usually demanded of the child.
	- <i>Restricted:</i> The child has no choice. Absolute obedience is required.

Reliability: Interobserver and test/retest reliabilities are reported by Simpson (1963) for 2 observational situations. In Situation A, raters observed a child and his parents at dinner; in Situation B they observed the same child on the school playground at recess. Situation A was judged moderately difficult to rate, while Situation B was considered socially chaotic and thus very difficult to rate. The ratings of 4 observers correlated .83 for Situation A and .38 for Situation B, using Kendall's coefficient of concordance.

Test/retest estimates, over a 6-week interval, were computed on: (1) the investigator's ratings; (2) the investigator's ratings and median ratings of 3 untrained observers; and (3) the investigator's ratings and the average ratings of 3 untrained observers. Kendall's coefficients of concordance were, respectively: .98 for Situation A and .85 for Situation B; .87 (A) and .71 (B); and .91 (A) and .69 (B). Coefficients obtained for Situation A were significant at the .001 level, for Situation B at the .01 or .02 level.

Validity: Data describing the validity of the Social Weather Rating Scales are scarce. Findings reported by Simpson (1963), however, indicate that: the social weather of preschool children (measured on these scales) differs from that of elementary school children in shared behavior settings; social weather varies for each child from setting to setting; and variance for preschool children is smaller within the home and greater outside the home than that for school children.

Norms: Normative data are not reported (Simpson, 1963).

Procedures for Use: The Social Weather Rating Scales are used in conjunction with very explicit behavior setting records described by Simpson (1963). The rater does not observe the child directly but instead rates his social weather using an episodic account of his interactions, recorded previously. He rates the child's treatment by marking an X at that point on the scale which best describes the variable in question. Procedures are outlined for recording variations or exceptions in the behavior of significant individuals interacting with the child.

The rater must attempt to make "objective" judgments, relying on his own perception of the overall behavior toward the child—and not on the child's (or anyone else's) apparent perception of it. That is, if the teacher treats the child in a neutral way, this behavior should be rated "neutral," even though the child may feel that it is cold and rejecting.

Comments: The Social Weather Rating Scales offer a technique for assessing the atmosphere of a setting or the overall treatment received by an individual. Though validity and normative data are inadequate, these scales can be recommended for research use. They are particularly appropriate for research assessing the effect of environment on behavior.

Reference: Simpson, J. E., "A method of measuring the social weather of children," in R. G. Barker (ed.), *The stream of behavior*. New York: Appleton-Century-Crofts, 1963.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Student Activity Profile (Student Activity #33)

AUTHOR: Fred K. Honigman, James Stephens

AUTHOR/PUBLISHER ADDRESS: F. K. Honigman, Jefferson Medical College,
Philadelphia, Pennsylvania

CRITERIA EVALUATED: 9

SUBJECT OF OBSERVATION

☐ TEACHER AND PUPILS
☐ TEACHER ONLY
☒ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☐ CLASSROOM, ANY SUBJECT
☒ CLASSROOM, SPECIFIC SUBJECT

CODING UNITS

NUMBER OF SUBJECTS OBSERVED
☐ 1 ONLY
☐ MORE THAN 2 PEOPLE IN
CLASSROOM
☒ POINT-TIME SAMPLE*

☐ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☐ TIME UNIT
☒ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

CATEGORY DIMENSIONS

☐ AFFECTIVE
☒ COGNITIVE
☐ PROCEDURE OR ROUTINE
☒ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☐ TRAINING
☒ EVALUATION

REFERENCE:

Mirrors for Behavior III: An Anthology of Instruments, Anita Simon and E. Gil Boyer,
Communications Materials Center, Wyncote, Pennsylvania, 1974, Pages 297-299.

* EACH STUDENT, BUT ONLY ONE AT A TIME

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Student Behavior Observation System (Student Behaviour #34)

AUTHOR: Hugh V. Perkins

AUTHOR/PUBLISHER ADDRESS: University of Maryland, College Park, Maryland

CRITERIA EVALUATED: 9

SUBJECT OF OBSERVATION

☐ TEACHER AND PUPILS
☐ TEACHER ONLY
☒ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED
☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

CODING UNITS

☒ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☐ TIME UNIT
☒ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☐ LIVE
☒ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

CATEGORY DIMENSIONS

☒ AFFECTIVE
☐ COGNITIVE
☐ PROCEDURE OR ROUTINE
☒ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☐ TRAINING
☐ EVALUATION

REFERENCE:

Mirrors for Behavior III: An Anthology of Instruments, Anita Simon and E. Gil Boyer, Communications Materials Center, Wyncote, Pennsylvania, 1974, Pages 477-479.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Student Observational Form (Student Obs. Form #35)

AUTHOR: C. M. Lindvall

AUTHOR/PUBLISHER ADDRESS: Learning Research and Development Center,
University of Pittsburgh, Pittsburgh, Pennsylvania

CRITERIA EVALUATED: 9, 18

SUBJECT OF OBSERVATION

☐ TEACHER AND PUPILS
☐ TEACHER ONLY
☒ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☐ CLASSROOM, ANY SUBJECT
☒ CLASSROOM, SPECIFIC SUBJECT
(I.E.P)

NUMBER OF SUBJECTS OBSERVED

☐ 1 ONLY
☐ MORE THAN 2 PEOPLE IN
CLASSROOM
☒ POINT-TIME SAMPLE

CODING UNITS

☐ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☐ TIME UNIT
☒ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

CATEGORY DIMENSIONS

☐ AFFECTIVE
☐ COGNITIVE
☐ PROCEDURE OR ROUTINE
☒ ACTIVITY
☒ SOCIOLOGICAL STRUCTURE
☐ OTHER

OBSERVER(S) REQUIRED

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☐ TRAINING
☐ EVALUATION

REFERENCE:

Mirrors for Behavior III: An Anthology of Instruments, Anita Simon and E. Gil Boyer,
Communications Materials Center, Wyncote, Pennsylvania, 1974, Pages 353-356.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Sequential Analysis of Verbal Interaction (SAVI #36)

AUTHOR: Yvonne Agazarian and Anita Simon

AUTHOR/PUBLISHER ADDRESS: Savi Associates, Philadelphia, Pennsylvania

CRITERIA EVALUATED: 7, 14, 16, 17

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☒ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED
☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

CODING UNITS

☒ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☒ TIME UNIT
☐ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☐ LIVE
☐ LIVE WITH CODING EQUIPMENT
☒ VIDEO AND/OR AUDIO TAPE

CATEGORY DIMENSIONS

☒ AFFECTIVE
☐ COGNITIVE
☐ PROCEDURE OR ROUTINE
☒ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

OBSERVER(S) REQUIRED

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☒ TRAINING
☒ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Page 474-476.

Name: SEQUENTIAL ANALYSIS OF VERBAL INTERACTION

Authors: Yvonne Agazarian and Anita Simon

Type of Measure: Observation coding system

Availability: Agazarian, Y., and A. Simon, *Sequential analysis of verbal interaction*. Philadelphia, Pennsylvania: SAVI Associates, 1974.

Description: Sequential Analysis of Verbal Interaction (SAVI), originally developed in 1960 and revised in 1974, is a system for analyzing verbal communication among people. SAVI is based on the assumption that the way in which something is said influences what is heard. This instrument provides a "mental snapshot" of what happens when people talk and predicts what is likely to happen next.

The SAVI categorizes verbal behavior as either approaching or avoiding problems to be solved. Approach Behaviors facilitate the transfer of information, while Avoidance Behaviors tend to distort or confuse information. In addition to these 2 types of behavior, the SAVI also describes Contingent Behaviors, the direction and effect of which are not always obvious. The impact of Contingent Behaviors on problem solving is, as the name implies, contingent upon the interactional context.

The SAVI also classifies messages as either Person, Factual, or Orienting. Person Messages address the person rather than what is said. Factual Messages contain the kinds of information that are basic to data input and data processing, and Orienting Messages determine the level of abstraction and sequence of context characterizing communication. Each of these types of messages is associated with 1 of the 3 categories of behavior, producing 9 classes of communication: (1) Person Avoidance Messages; (2) Person Approach Messages; (3) Person Contingent Messages; (4) Factual Avoidance Messages; (5) Factual Approach Messages; (6) Factual Contingent Messages; (7) Avoidance Orienting Messages; (8) Approach Orienting Messages; and (9) Contingent Orienting Messages. When communication is categorized by this procedure, patterns of verbal behavior emerge. For example, if the frequency of Avoidance Messages is high, the overall pattern indicates defensive communication. In such a situation it is unlikely that information relevant to some objective goal or target will be transferred in ways that lead to effective problem solving.

The authors believe that identifying patterns of communication is the first step toward influencing them. They designed SAVI to allow individuals to gain practical and theoretical knowledge of *how* to say *what* in order to resolve the problems inherent in communicating. Such an instrument has obvious implications for teacher training and analysis of classroom interaction.

Sample Items: The 9 classes of communication are characterized by behaviors of the following type.

Person Avoidance Message: self-defensive behavior

Person Contingent Message: personal history

Person Approach Message: personal support

Factual Avoidance Message: small talk

Factual Contingent Message: factual question

Factual Approach Message: factual answer

Orienting Avoidance Message: being obscure

Orienting Contingent Message: opinion

Orienting Approach Message: building on ideas

Reliability: Reliability estimates are reported by Agazarian (1968), who observed a group of people and taped their voices, later categorizing the recorded verbal behaviors on the SAVI. Intercode agreement, calculated for 10-minute periods, ranged from 87 to 96%. During a later phase of this study, reliability was checked by obtaining judgments from two separate raters on a systematic sampling of SAVI classifications. Agreement between judges and agreement with the initial coding was 100%.

Validity: Agazarian (1968) selected 2 external criteria against which to validate the SAVI: targetness (the goal orientation of the group) and convergence (continuity of topic). Communication was viewed as convergent when the topic of a message was the same as that of the preceding message, and as divergent when a new topic was introduced. Subjects observed were a group of people attending a conference to solve a specific problem. Their communication was categorized on the SAVI. Incidents of verbal behavior were also independently judged according to the selected criteria, i.e., as either on or off target, and convergent or divergent. Fisher's discriminate function yielded data which confirmed the ability of the SAVI categories to discriminate targetness and convergence at less than the .01 level of probability. A *chi square* statistic showed that 9 specific categories were significantly related to targetness, 3 in an off-target direction and 6 in an on-target direction. Three categories related significantly to convergence and seven to divergence. These findings, along with the overall distribution of the categories, revealed a pattern of cross-purpose talk. Since the group observed had a cross-purpose goal, it was expected that both interpersonal maintenance and interpersonal conflict behaviors would be avoided, as they were.

Norms: No normative data are reported (Agazarian, 1968; Agazarian and Simon, 1974).

Procedures for Use: In using the SAVI, verbal behavior is recorded on tape (usually in 10-minute samples) and later transcribed. Listening to the tape, a coder classifies the verbal interaction by labeling the transcribed statements according to the appropriate SAVI category. The coded transcript is scored in terms of frequency of occurrence of various kinds of behavior.

Comments: The SAVI system provides a unique perception of communication using 9 classes of behavior which are well defined and illustrated. These 9 classes can accommodate all verbal behavior to provide an objective basis on which to analyze the effectiveness of communication. Additional research data, including further evidence of reliability and validity, should be obtained and reported. Since this instrument appears to have value for teacher training or classroom interaction assessments, data collected in educational settings would be of interest.

References: Agazarian, Y., *A theory of verbal behavior and information transfer*. Unpublished doctoral dissertation, Temple University, 1968.

Agazarian, Y., and A. Simon, *Sequential analysis of verbal interaction*. Philadelphia, Pennsylvania: SAVI Associates, 1974.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Social Interaction and Creativity in Communication (SICC #37)

AUTHOR: David L. Johnson

AUTHOR/PUBLISHER ADDRESS: Institute of Human Resources, Streator, Illinois

CRITERIA EVALUATED: 14, 16, 17, 19

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

CODING UNITS

NUMBER OF SUBJECTS OBSERVED

☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

☒ CATEGORY CHANGE
☐ TOPIC CHANGE

☐ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

CATEGORY DIMENSIONS

☒ AFFECTIVE
☒ COGNITIVE
☐ PROCEDURE OR ROUTINE
☒ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

USES REPORTED BY AUTHOR

☒ RESEARCH
☐ TRAINING
☐ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Pages 477-479.

Name: SOCIAL INTERACTION AND CREATIVITY IN COMMUNICATION SYSTEM

Author: David L. Johnson

Type of Measure: Observation coding system

Availability: Johnson, D. L., *Social Interaction and Creativity in Communication System. Coding manual.* Streator, Illinois: Institute of Human Resources, 1975.

Description: The Social Interaction and Creativity in Communication System (SICCS) was designed to assess the social and environmental conditions facilitating, hindering, or otherwise affecting creative performance. The product of extensive and continuing developmental work, SICCS is based on a well defined, social/psychological conceptualization of creativity. This conceptual model focuses on verbal acts in the context of social interaction. According to Johnson (1975), "verbal acts may be creative, and creative processes may be examined sequentially in relation to antecedent and subsequent speaker acts (p. 6)." Creativity is viewed as an unexpected, original verbal act emitted spontaneously by a speaker in social interaction and affected by the verbal acts of antecedent speakers. The verbal act (a phrase, clause or simple sentence) and the interact (a verbal act followed by at least 1 verbal act emitted by another speaker) serve as the units of analysis employed by the SICCS. They are observed and coded according to the following categories:

I. Antecedent Modes of Verbal Activity

- A. Appraisal**
 - 1. Positive Judgment
 - 2. Negative Judgment
- B. Prescriptive**
 - 1. Direction
 - 2. Standard
- C. Informational**
 - 1. Certain
 - 2. Uncertain
- D. Questioning**
 - 1. Narrow
 - 2. Broad

II. Subsequent Student Performance

- A. Self-Reference**
 - 1. Positive
 - 2. Negative
- B. Self-Initiated**
 - 1. Volunteering
 - 2. Redirecting
 - 3. Interrupting

- C. Productivity
 - 1. Productive
 - 2. Elaboration
 - 3. Construction
 - 4. Reinterpretation
- D. Quantity
 - 1. Length
 - 2. Number

Sample Items: Johnson (1975) defines the categories listed above and provides numerous examples of verbal acts typically recorded under each one. For instance, a self-referenced verbal act is "one in which the speaker makes explicit reference to his own characteristics (p. 21)." It is coded positively if the speaker asserts responsibility for the content (e.g., "I think people usually do what is expected of them."). However, when the speaker repudiates or denies responsibility for the content of a verbal act (e.g., "I didn't say that."), it is coded negatively.

Reliability: Using a Kappa (K) coefficient of agreement, Johnson (1971) calculated mean interrater reliabilities for all SICCS categories based on sixth- and eleventh-grade lesson transcripts. These ranged from .85 to .93 for the antecedent mode categories and from .87 to 1.00 for the student performance categories. Mean percentages of intercoder agreement computed on 10 bilingual transcripts from kindergarten and first-through third-grade classes ranged from 95.6 to 97.6% for the mode categories, and from 91.5 to 100.0% for the performance categories (Johnson, 1974).

Validity: Although the SICCS is a relatively new instrument, various forms have been employed in a number of studies, and evidence of validity is accumulating. For example, Smith (1972), using the SICCS to observe 6 small group sessions in a drug-abuse treatment center, found that uncertain rather than certain informational acts and broad rather than narrow questions were positively related to a greater number of subsequent verbal acts. Childers (1974), studying open and closed school systems, observed fourth- through sixth-grade classrooms and reported a higher incidence of self-initiated, positive self-referenced, and longer interactions in the open rather than the closed environments.

Studies by Johnson have also produced results in the expected directions. Observing 4 classrooms in a small, coeducational community college, he found the teachers' use of broad questioning, more than any other mode category, to be significantly and consistently associated with student creativity recorded on the SICCS performance categories. Also, the teachers' uncertain informational acts were more consistently related to student talents than were the prescriptive or appraisal modes (Johnson, 1972). Similarly, in an analysis of 24 taped social studies lessons from sixth- and eleventh-grade classrooms, Johnson (1973) found that both broad questioning and uncertainty in teacher informational

acts were associated with a higher quantity and quality of student verbal performance. Teacher appraisals, on the other hand, appeared to terminate or inhibit student participation.

Norms: No comprehensive normative data are provided in the *SICCS Coding Manual* (Johnson, 1975). However, classroom interaction outcomes for various groups are reported (as frequencies and percentages) in his individual studies (Johnson, 1972; 1973; 1974).

Procedures for Use: Student/teacher interaction can be studied on the SICCS using: (1) direct observation; (2) direct observation and audio tape recording; or (3) direct observation and audio/video tape recording. When either of the last 2 procedures is employed, the tape, rather than the live interaction, is coded. Johnson (1975) provides detailed instructions, including an explanation of codes, the sequence of coding steps, and examples of tape transcripts and completed coding sheets, for all 3 procedural alternatives.

Comments: The Social Interaction and Creativity in Communication System is based on the idea that student creativity is affected by the social/psychological conditions present in the classroom. Though carefully developed and revised according to an explicit theoretical model, this instrument is more complex than many of the observation coding systems available, and its manual is less clear than it might be. However, the SICCS demonstrates good reliability and validity and, when used by trained observers, is a useful research tool.

References: Childers, V., *Open-closed school system expectations and observed pupil behavior*. Unpublished master of arts thesis, Baylor University, 1974.

Johnson, D. L., *Classroom interaction and student creativity*. Unpublished doctoral dissertation. University of Missouri, 1971.

Johnson, D. L., *Teacher and student classroom interaction and student verbal creativity*. Paper presented at the annual meeting of the Southwestern Social Science Association, San Antonio, Texas, March 1972.

Johnson, D. L., "A conceptual model of teacher and student classroom interaction and observed student verbal creativity." *Psychology in the Schools*, 1973, 10, 475-481.

Johnson, D. L., *Teacher-pupil interaction in bilingual elementary school classrooms*. Paper presented at the annual meeting of the Southwestern Social Science Association, Dallas, Texas, March 1974.

Johnson, D. L., *Social Interaction and Creativity in Communication System. Coding manual*. Streator, Illinois: Institute of Human Resources, 1975.

Smith, R., *The effects of various verbal modalities on the quantity of subsequent verbal acts*. Senior research paper, Missouri Southern State College, 1972.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Spaulding Teacher Activity Rating Schedule (STARS) (Forms Battery With CASES - Spaulding) (STARS #38)

AUTHOR: Robert L. Spaulding

AUTHOR/PUBLISHER ADDRESS: Institute for Research in Child Development, Room 200, School of Education, San Jose University, 125 South 7th Street, San Jose, California 95192

CRITERIA EVALUATED: 1, 7, 12, 16, 17

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☒ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED

☒ 1 ONLY
☐ MORE THAN 2 PEOPLE IN CLASSROOM

CODING UNITS

☐ CATEGORY CHANGE
☐ TOPIC CHANGE

☐ SPEAKER CHANGE
☐ TIME UNIT
☒ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

CATEGORY DIMENSIONS

☒ AFFECTIVE
☒ COGNITIVE
☒ PROCEDURE OR ROUTINE
☒ ACTIVITY
☒ SOCIOLOGICAL STRUCTURE
☐ OTHER

OBSERVER(S) REQUIRED

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☒ TRAINING
☐ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Pages 167-169.

**Name: SPAULDING TEACHER ACTIVITY RATING SCHEDULE
(STARS)**

Author: Robert L. Spaulding

Type of Measure: Observation coding system

Availability: This instrument may be ordered from: Robert L. Spaulding, Institute for Research in Child Development, Room 200, School of Education, San Jose State University, 125 South 7th Street, San Jose, California 95192.

Description: The Spaulding Teacher Activity Rating Schedule (STARS) is an observation coding system designed to assess the cognitive instructional methods and affective and control strategies of teachers. The current form is a 1975 revision of an earlier edition reviewed in *Mirrors for Behavior* (Simon and Boyer, 1970). Both forms have been used in teacher training to provide feedback to prospective teachers about their cognitive and affective styles. The revised form has also been used, along with its companion instrument, Coping Analysis Schedule for Educational Settings (CASES), in a study relating teacher behaviors and student outcomes (Spaulding, 1975b).

Sample Items: STARS consists of several molar categories, under which are subsumed a number of subcategories. These categories, listed below, are defined by Spaulding (1975b):

1. General
 - a. Nontransactional behavior
 - b. Disapproval with aversive stimuli
 - c. Disapproval without aversive stimuli
 - d. Withholding reinforcers when a student bids for attention
 - e. Approval with positive affect present
2. Social and/or Motor Structuring and Restructuring
 - a. Social and/or motor structuring
 - b. Social and/or motor restructuring
3. Cognitive Structuring and Restructuring—unrelated to academic task
4. Concept Formation, Attainment, or Development by Discovery Methods
 - a. Simple
 - b. Complex
5. Concept Formation, Attainment, or Development by Deductive Methods
 - a. Simple
 - b. Complex
6. Concept Formation, Attainment, or Development by Transductive Methods
 - a. Simple
 - b. Complex

7. Concept Formation, Attainment, or Development by Expository Methods
 - a. Telling—Simple
 - b. Telling—Complex
 - c. Rote Process—Simple
 - d. Rote Process—Complex
8. Cognitive Structuring or Restructuring by Focusing Attention on Data
9. Concept Checking, Testing, Strengthening
 - a. Asking for or eliciting recall—Simple
 - b. Asking for or eliciting recall—Complex
 - c. Asking for use or application—Simple
 - d. Asking for use or application—Complex
10. Valuing
 - a. Expressing
 - b. Eliciting
11. Listening and/or Observing

Reliability: Preliminary work by Spaulding (1975a) indicates that split-half reliability is highly variable for some categories and more consistent for others. Routine recordings of interobserver agreement fall in the .80s and .90s.

Validity: STARS is based on a factor analytic study of 113 categories of teacher/student interaction observed in 21 elementary school classrooms. Three types of teacher variables recorded on STARS were significantly related to student performance and self-concept: (1) supportive teacher behaviors which served as rewards; (2) aversive behaviors which served as punishment; and (3) goal setting behaviors which served to clarify or structure the environment for the student. Other researchers have also found these variables to be significantly related to change in student behaviors (Sibley, Abbott, and Cooper, 1967, as cited by Simon and Boyer, 1970).

Norms: Norms can be derived by summing frequencies over several observation periods. An example of norm setting is provided by Simon and Boyer (1970).

Procedures for Use: STARS is generally used in conjunction with CASES. Together, the measures yield a picture of student/teacher interaction. Data are gathered by time sampling techniques, using 10-second intervals.

STARS yields a total score derived from a weighted interaction matrix using CASES and STARS. Frequencies from each cell of the matrix are weighted, added, and divided by the total number of tallies to produce an Overall STARS Coefficient.

Comments: STARS appears to be a relatively reliable and valid measure of the teacher's cognitive, affective, and control behaviors. STARS is a versatile system which can be used in conjunction with a variety of instruments, in a variety of settings, for both research and teacher training.

- References:** Simon, A., and E. G. Boyer, *Mirrors for behavior. An anthology of observation instruments*. Philadelphia: Research for Better Schools, 1970.
- Spaulding, R. L., Personal communication, November 26, 1975. (a)
- Spaulding R. L., *The Spaulding Teacher Activity Rating Schedule (STARS)*. San Jose, California: Institute for Research in Child Development, School of Education, San Jose State University, 1975. (mimeo) (b)

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Teacher Behavior Observation System (Teacher Behaviour #39)

AUTHOR: Hugh V. Perkins

AUTHOR/PUBLISHER ADDRESS: University of Maryland, College Park, Maryland

CRITERIA EVALUATED: 4, 16, 17, 19

SUBJECT OF OBSERVATION

SETTINGS

☒ TEACHER AND PUPILS
☒ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

CODING UNITS

NUMBER OF SUBJECTS OBSERVED
☒ 1 ONLY
☐ MORE THAN 2 PEOPLE IN CLASSROOM

☒ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☐ TIME UNIT
☒ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

CATEGORY DIMENSIONS
☒ AFFECTIVE
☐ COGNITIVE
☐ PROCEDURE OR ROUTINE
☐ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☐ TRAINING
☐ EVALUATION

REFERENCE:

Mirrors for Behavior III: An Anthology of Instruments, Anita Simon and E. Gil Boyer, Communications Materials Center, Wyncote, Pennsylvania, 1974, Pages 473-475.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Instrument for Coding Teacher Verbal and Non-Verbal Behavior (Teacher Verb-NonVerb #40)

AUTHOR: E. Wayne Roberson

AUTHOR/PUBLISHER ADDRESS: Epic Evaluation Center, Tucson, Arizona

CRITERIA EVALUATED: 4, 11, 12, 16, 17, 19

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED
☒ 1 ONLY
☐ MORE THAN 2 PEOPLE IN CLASSROOM

CODING UNITS

☐ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☐ TIME UNIT
☒ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☐ LIVE
☐ LIVE WITH CODING EQUIPMENT
☒ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

CATEGORY DIMENSIONS
☒ AFFECTIVE
☒ COGNITIVE
☐ PROCEDURE OR ROUTINE
☒ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☒ TRAINING
☐ EVALUATION

REFERENCE:

Mirrors for Behavior III: An Anthology of Instruments, Anita Simon and E. Gil Boyer, Communications Materials Center, Wyncote, Pennsylvania, 1974, Pages 513-516.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Teacher-Child Dyadic Interaction (Teacher-Child Dyadic #41)

AUTHOR: Jere E. Brophy, Thomas L. Good

AUTHOR/PUBLISHER ADDRESS: University of Texas, Austin, Texas

CRITERIA EVALUATED: 3, 8, 17, 19

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED

☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

CODING UNITS

☒ CATEGORY CHANGE
☒ TOPIC CHANGE
☒ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

CATEGORY DIMENSIONS

☒ AFFECTIVE
☒ COGNITIVE
☒ PROCEDURE OR ROUTINE
☐ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

OBSERVER(S) REQUIRED

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☐ TRAINING
☐ EVALUATION

REFERENCE:

Mirrors for Behavior III: An Anthology of Instruments, Anita Simon and E. Gil Boyer, Communications Materials Center, Wyncote, Pennsylvania, 1974, Pages 191-197.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Waimon System (Waimon #42)

AUTHOR: Morton D. Waimon
AUTHOR/PUBLISHER ADDRESS:

Illinois State University, Normal, Illinois

CRITERIA EVALUATED: 8,11, 16, 17, 19,

SUBJECT OF OBSERVATION

SETTINGS

☒ TEACHER AND PUPILS
☒ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

CODING UNITS

NUMBER OF SUBJECTS OBSERVED
☒ 1 ONLY
☐ MORE THAN 2 PEOPLE IN CLASSROOM

☒ CATEGORY CHANGE
☐ TOPIC CHANGE
☒ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

CATEGORY DIMENSIONS
☒ AFFECTIVE
☒ COGNITIVE
☒ PROCEDURE OR ROUTINE
☐ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☒ TRAINING
☐ EVALUATION

REFERENCE:

Mirrors for Behavior III: An Anthology of Instruments, Anita Simon and E. Gil Boyer, Communications Materials Center, Wyncote, Pennsylvania, 1974, Pages 639-641

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Wallen's Modification of Flanders' Interaction Analysis (Wallen's Flanders Mod. #43)

AUTHOR: Norman E. Wallen
AUTHOR/PUBLISHER ADDRESS: Source in Wallen (1966)

CRITERIA EVALUATED: 4, 7, 11, 17, 19

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED

☒ 1 ONLY
☐ MORE THAN 2 PEOPLE IN CLASSROOM

CODING UNITS

☒ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☐ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

CATEGORY DIMENSIONS

☒ AFFECTIVE
☒ COGNITIVE
☐ PROCEDURE OR ROUTINE
☐ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☐ TRAINING
☐ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Pages 173-174.

Name: WALLEN'S MODIFICATION OF FLANDERS' INTERACTION ANALYSIS

Author: Norman E. Wallen

Type of Measure: Observation coding system

Availability: Wallen, N. E. *Relationships between teacher characteristics and student behavior—Part III*. Salt Lake City, Utah: Department of Educational Psychology, University of Utah, 1966. (ERIC Document Reproduction Service No. ED 010 390)

Description: This observation procedure was developed in a study of teacher behavior and pupil change (Wallen, 1966). In designing this system, the author modified Flanders' Interaction Analysis (1962) in regard to focus, recording procedures, and number and nature of behavioral categories observed. The focus, for example, was limited to teacher behavior only. Also, the continuous, sequential recording which characterizes the Flanders system was abandoned in favor of a simple frequency approach. Finally, some of Flanders' categories which were inapplicable to or inappropriate for the first- and third-grade samples used by Wallen were altered, producing the behavioral classifications listed below.

1. Acknowledges student's raised hand
2. Praise and encouragement
- 2a. Nonverbal affiliation
3. Minimal reinforcement
4. Asking questions with the intent that the student answer.
5. Explaining or problem structuring
6. Academic control
7. Personal control
- 7m. Moralizing by teacher
8. Hostility and reprimands
- 8x. Ignores child's behavior when child is attempting to get teacher's attention.

In using the system, the observer may record a given teacher behavior in more than one category. For example, if the teacher praises a pupil in an attempt to control the others, the action would be tallied as both a 7 (personal control) and then as either a 2 or a 3, depending on the strength of the reinforcement given.

Sample Items: While many of Wallen's categories are self-explanatory, he provides examples of specific behaviors which are coded under each area. "Non-verbal affiliation," for example, includes physical contact with the student, such as putting an arm around him or her. "Minimal reinforcement" refers to comments such as, "uh huh," "okay," "right," etc.

Reliability: The records of 4 raters who had observed the same teachers at the same time, shortly before and midway through the major data collection period, were compared by Wallen (1966). Descriptive profiles for 2 teachers showed adequate agreement among observers. Correlations between observations recorded simultaneously by the 2 members of each recording team also showed good correspondence. These ranged from .85 to .96 for Team I ($N = 33$ teachers) and from .65 to .94 for Team II ($N = 34$ teachers).

The 2 observation teams were also compared with regard to overall mean frequencies in each category. They showed close agreement in all areas except problem structuring (Wallen, 1968).

Validity: Validity may be inferred from correlations between teacher behavior observed on this system and (1) other assessments of teacher classroom behavior and (2) measures of pupil behavior.

After all observations had been completed, Wallen (1966) instructed observers to Q-sort the sample of teachers according to 10 categories analogous to those on the observation system. Results of these Q-sorts were correlated with observational data, revealing a satisfactory and expected relationship between the two. For example, "praise and encouragement" on the observation scale correlated positively with the Q-sort dimensions, "warmth" and "supportive behavior." Coefficients were .67 and .60, respectively, for the first grade, and .47 and .42 for the third grade. Similarly, "praise and encouragement" correlated negatively with "punitive behavior" on the Q-sort.

Relationships between teacher behavior and pupil behavior also generally supported the validity of the observation system. Measures of pupil behavior included the following: California Achievement Tests; Circles Test from the Torrance Tests of Creative Thinking; the Barron-Welsh Art Scales; a sociometric device; and a Pupil Questionnaire composed of items from the Sarason Test Anxiety Scale and Medley and Kline's Liking for School Test (Wallen, 1966).

Norms: Wallen (1966) presents observational data collected on 36 first-grade and 40 third-grade teachers in a large metropolitan school district in Salt Lake City.

Procedures for Use: In using this system, the observer sits in the classroom for five 30-minute periods and records teacher behaviors in the appropriate categories. No attempt is made to indicate the sequence of these behaviors. Both frequency and proportion (percentage) scores are derived from the data obtained.

Comments: Wallen's observation system offers an uncomplicated, easy-to-use procedure for assessing the affective behavior of teachers. It requires low inference and relatively limited training on the coders' part and demonstrates adequate agreement among observers.

Reference: Wallen, N. E., *Relationships between teacher characteristics and student behavior—Part III*. Salt Lake City, Utah: Department of Educational Psychology, University of Utah, 1966. (ERIC Document Reproduction Service No. ED 010 390)

Section B:
Instrument Summaries for Pupil Use

Table 2
Instruments and Criteria for Pupil Use[illegible]

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Class Activities Questionnaire (#1)

AUTHOR: Joe M. Steele

AUTHOR/PUBLISHER ADDRESS:

Dr. Robert Rosemier, 520 College View Court,
Northern Illinois University, DeKalb, Illinois, 60115

CRITERIA EVALUATED:

10, 13, 14, 17, 19

SUBJECT OF OBSERVATION

SETTINGS

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED

☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN
CLASSROOM

CODING UNITS

☐ CATEGORY CHANGE
☐ TOPIC CHANGE

☐ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☒ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE (RETROSPECTIVE RATINGS)
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

CATEGORY DIMENSIONS

☒ AFFECTIVE
☒ COGNITIVE
☒ PROCEDURE OR ROUTINE
ACTIVITY
☒ SOCIOLOGICAL STRUCTURE
☐ OTHER

OBSERVER(S) REQUIRED

☒ 1 PERSON (TEACHERS AND STUDENTS)
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☐ RESEARCH
☐ TRAINING
☒ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Pages 402-405

Name: CLASS ACTIVITIES QUESTIONNAIRE

Author: Joe M. Steele

Type of Measure: Rating scale

Availability: This instrument can be ordered from Dr. Robert Rosemier, 520 College View Court, Northern Illinois University, DeKalb, Illinois 60115.

Description: The Class Activities Questionnaire (CAQ) is a measure of instructional climate administered to both the student (in grades 7 and above) and the teacher. CAQ results obtained from students suggest *actual* classroom emphases, while those from the teacher indicate *intended* emphases. These 2 sets of data can be compared for purposes of research or teacher self-assessment.

Developed in 1969 as part of a large-scale evaluation of gifted classes throughout the state of Illinois, the CAQ was designed to incorporate 2 theoretical domains of instructional climate: Cognitive and Affective. Results of field testing and factor analysis indicated that these domains are represented on the questionnaire by the 5 dimensions and 20 factors listed below:

<i>Dimensions</i>	<i>Factors</i>
1. Lower Thought Processes	1. Memory
	2. Translation
	3. Interpretation
2. Higher Thought Processes	4. Application
	5. Analysis
	6. Synthesis
	7. Evaluation
3. Classroom Focus	8. Discussion
	9. Test/Grade Stress
	10. Lecture
4. Classroom Climate	11. Enthusiasm
	12. Independence
	13. Divergence
	14. Humor
	15. Ideas Valued
	16. Ideas Enjoyed
	17. Teacher Talk
	18. Homework
5. Student Opinions	19. Qualities
	20. Deficiencies

These factors are in turn represented by items describing (1) cognitive demands made of students and (2) affective classroom conditions.

Sample Items: The CAQ contains 25 items of the following type to which the

subject responds on a 4-point scale (from "Strongly Agree" to "Strongly Disagree"):

1. The student's main task is to remember or recognize factual material.
2. Students in this class are often required to decide whether things are good or bad, right or wrong, and to explain why.
3. Students are enthusiastic about and interested in class activities.
4. In this class there is very little laughing or kidding around.

Five additional CAQ items (3 of which are open-ended) request information about teacher activity, student preparation for class, and student preferences and opinions. The questionnaire also provides space for 20 optional, locally generated items.

Reliability: Though reliability figures are not reported for the most recent revision of the CAQ, estimates based on a preliminary version of the questionnaire are available (Steel, House, and Kerins, 1971). Using the Horst formula (1949), reliabilities were computed from within-class and between-class variances ($N = 131$ classes). These ranged from .76 to .88 for the CAQ dimensions and from .58 to .94 for the factors. Only 1 of 20 coefficients fell below .65.

Test/retest reliabilities, based on factor scores from 6 classes, were also computed for an early form of the CAQ. These figures, which ranged from .59 to .91, were viewed as tentative since the classes tested, being small and employing independent study modes, were considered atypical (Steele, House, and Kerins, 1971).

Validity: Studies conducted with preliminary versions of the CAQ offer some evidence of construct and concurrent validity. Factor analyses of CAQ results obtained from gifted classes substantially supported the logical construction of the instrument, though 2 factors, Divergence and Memory, proved to be weak. Generally, statistical components were closely related to the theoretical structure of the CAQ, with 8 of 10 logically paired items intact after empirical analysis (Steele, House, and Kerins, 1971). Using a normal rather than a gifted population, Wahlstrom (1971) analyzed the CAQ and confirmed its affective and cognitive dimensions, thus supplying further factorial validation of the scale.

Concurrent validity is suggested by differences (significant beyond the .001 level) between the CAQ subscores of average and gifted samples. Average classes as a group are seen as emphasizing 3 of the 7 cognitive processes represented on the scale, while gifted classes are seen as stressing 6. Only 8% of the average classes emphasized 4 or more cognitive levels, but 45% of the gifted classes emphasized from 4 to 6 levels.

On the affective dimensions of the CAQ, the contrast between average and gifted classes was also marked. Average classes were characterized by lack of enthusiasm, stress on grades and tests, and a greater proportion of time (75% to

90%) devoted to teacher talk. Gifted classes, on the other hand, stressed discussion and active student involvement. In almost one-third of these classes, teachers were seen as talking less than 40% of the time. Furthermore, gifted students reported less stress on tests and grades and a great deal more enthusiasm (Steele, House, and Kerins, 1971).

Norms: Extensive normative data are not reported (Steel, 1969; Steele, 1973). However, some comparative statistics (percentage of classes within a school or subject area which emphasize each factor, for example) are available from the Scoring Center at Northern Illinois University which services the CAQ.

Administration and Scoring: The CAQ can be administered by the classroom teacher in about 30 minutes. Printed on optical scanning forms for automated keypunching and computer scoring, test forms can be purchased and processed for \$5.00 per class of 25. Completed questionnaires are sent to Dr. Robert Rosemier at Northern Illinois University, where they are scored, analyzed, and returned to individual teachers within 2 weeks. The CAQ's are usually treated by class, unless special analyses are requested. The user receives a 4-page computer printout containing: (1) frequency distributions and means of student responses to the open-ended items; (2) teacher intended and predicted responses for the same items; (3) results grouped by paired items with the proportion of individual students responding consistently calculated for each pair; (4) a summary of students' perceived emphases based on a scoring formula; and (5) a comparison of the students' perceptions with teacher intentions and predictions.

Comments: The Class Activities Questionnaire provides a measure of classroom climate by requiring students to make low-inference judgments about prevailing patterns of instruction. It is intended for use in large-scale evaluation of educational programs and in teacher self-assessment. CAQ authors have attempted to prevent its use as a tool for evaluating instructors, strongly discouraging administrators from using it "on" teachers. Considering its fairly recent development, this instrument is supported by substantial research, most of which confirms its validity.

References: Steele, J. M., *Class Activities Questionnaire (CAQ). General information.* Unpublished paper, 1969. (Available from the author, Evaluation Center, Mars Hill College, Mars Hill, North Carolina 28754).

Steele, J. M., *Availability and use of the Class Activities Questionnaire.* Unpublished paper, 1973. (Available from the author, Evaluation Center, Mars Hill College, Mars Hill, North Carolina 28754).

Steel, J. M., E. R. House, and T. Kerins, "An instrument for assessing instructional climate through low-inference student judgments." *American Educational Research Journal*, 1971, 8, 447-466.

Wahlstrom, M. W., *Factorial validation of the Class Activities Questionnaire*. Paper presented at the meeting of the American Educational Research Association, New York, 1971.

Walberg, H. J., E. R. House, and J. M. Steele, "Grade level, cognition, and affect: A cross-section of classroom perceptions." *Journal of Educational Psychology*, 1973, 64(2), 142-146.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Diagnostic Teacher-Rating Scale (#2)

AUTHOR: Sister Mary Amatora

AUTHOR/PUBLISHER ADDRESS: Cincinnati, Ohio: Educators'-Employers' Tests and Services Associates, 1938

CRITERIA EVALUATED: 4, 7, 10, 11, 17, 18

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED

☒ 1 ONLY
☐ MORE THAN 2 PEOPLE IN CLASSROOM

CODING UNITS

☐ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☒ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE (RETROSPECTIVE RATINGS)
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

☒ 1 PERSON (STUDENTS)
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

CATEGORY DIMENSIONS

☐ AFFECTIVE
☐ COGNITIVE
☒ PROCEDURE OR ROUTINE
☐ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☒ OTHER (STUDENT ATTITUDES)

USES REPORTED BY AUTHOR

☐ RESEARCH
☐ TRAINING
☒ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Pages 120-122.

Name: DIAGNOSTIC TEACHER-RATING SCALE

Author: Sister Mary Amatora

Type of Measure: Rating scale

Availability: Amatora, M., *Diagnostic teacher-rating scale*. Cincinnati, Ohio: Educators'-Employers' Tests and Services Associates, 1938.

Description: The Diagnostic Teacher-Rating Scale measures students' attitudes toward their teachers. The instrument was originally based on a list of teacher characteristics "liked" and "disliked" by a group of 200 children in grades 4 through 8. Three hundred teacher qualities were selected from this list. Items were written to represent these qualities and were organized on 7 scales: Liking for the Teacher; Ability to Explain; Kindliness, Friendliness, and Understanding; Fairness in Grading; Discipline; Amount of Work Required; and Liking for Lessons. Further revision reduced the number of items to 200, which were then sorted into 11 graduated categories, according to their estimated value. The 98 items determined most valuable were retained and arranged on 2 parallel forms (A and B), each containing 49 items, 7 on each scale. These 2 forms constitute the Diagnostic Check List, which is the major component of the Diagnostic Teacher-Rating Scale. The minor component is the Area Scale, a list of 7 questions corresponding to the 7 scales on the Check List.

Sample Items: The Area Scale contains questions which the student answers on a 5-point scale, ranging from "best" to "worst." The Diagnostic Check List, on the other hand, presents a series of qualities which may or may not apply to the teacher. The student simply checks those characteristics which he feels are typical of his teacher. The rating scale contains items of the following type:

<i>Area Scale</i>	<i>Best</i>					<i>Worst</i>
1. How clear are your teacher's explanations?	1	2	3	4	5	
2. How much do you like your teacher?	1	2	3	4	5	
3. How well does your teacher manage children in the classroom?	1	2	3	4	5	

Diagnostic Check List

Scale I. Liking the Teacher

- ☐ 1. Best teacher I've had.
- ☐ 2. Smiles.
- ☐ 3. Polite.
- ☐ 4. Nice-looking.
- ☐ 5. Doesn't keep the room neat.
- ☐ 6. Doesn't have good sense of humor.
- ☐ 7. Mean.

Reliability: The reliability of the Area Scale was investigated by Tschechtelin, Hippskind, and Remmers (1940). Using the split-half procedure on a group of 31 teachers and 610 students, they obtained coefficients ranging from .86 to .96.

The reliability of the Diagnostic Check List was estimated by correlating forms A and B. Data from a sample of 300 children produced coefficients ranging from .72 to .81 (reported in Buros, 1959).

Validity: Validity of the Diagnostic Teacher-Rating Scale can be approached in several ways (Remmers and Gage, 1955). First, since the instrument is designed to measure pupil attitudes, its validity may be assumed from its reliability. Or, if verbalized opinions are considered measures of attitude, the scale achieves construct validity to the extent to which it assesses verbalized opinions.

More concrete evidence of validity is provided by the scale's ability to differentiate between groups. A study by Tschechtelin, Hippskind, and Remmers (1940) indicates that scores discriminate between teachers selected by students as "best" and "poorest."

Correlations among the scales on the Diagnostic Check List and between the Area Scale and Diagnostic Check List also suggest validity. Correlations among the Check List scales are low (.06 to .33), while those between the Area Scale and the Check List are high (.74 to .90 for Form A, .75 to .91 for Form B).

Norms: Tentative norms are reported as percentile equivalents of the average ratings on each of the 7 scales.

Administration and Scoring: The Diagnostic Teacher-Rating Scale may be administered to students in grades 4 through 12 by principals, superintendents, supervisors, researchers, or teachers. When administered by the teacher being rated, suggestions are provided (Amatora, 1952) to insure honest responses from pupils. Though the scale is not timed, it usually takes about 30 minutes to complete.

The Area Scale is scored by adding the values of all responses to each of the 7 questions and then dividing each total by the number of pupils responding. Thus 7 scores are produced for the Area Scale. If a total score is desired, the 7 raw scores may be averaged.

The Diagnostic Check List is scored by computing the median number of items marked on each scale. The score for each scale is then found on a table. A total score for the Check List may be determined by finding the median value of these 7 scale scores.

The 2 parts of the instrument may be compared to find strengths, weaknesses, and areas needing improvement.

Comments: Although developed in 1938, the Diagnostic Teacher-Rating Scale remains a useful measure of students' attitudes toward the teacher, since item content is not at all dated. This scale has been frequently used in spite of

insufficient validity and normative data. Evidence of criterion-related validity, along with updated norms, would increase the value of this instrument.

References: Amatora, M., "Can elementary school children discriminate traits in their teachers?" *Child Development*, 1952, 23, 75-79.

Amatora, M., "A diagnostic teacher-rating scale." *Journal of Psychology*, 1950, 80, 395-399.

Amatora, M., "*Manual of directions for Diagnostic Teacher-Rating Scale.*" Cincinnati, Ohio: Educators'-Employers' Tests and Services Associates, 1952.

Buros, O. K., *The fifth mental measurements yearbook*. Highland Park, New Jersey: The Gryphon Press, 1959.

Remmers, H. H., and N. L. Gage, *Educational measurement and evaluation*. New York: Harper & Brothers, 1955.

Tschechtelin, M. A., M. J. F. Hipskind, and H. H. Remmers, "Measuring the attitudes of elementary-school children toward their teachers." *Journal of Educational Psychology*, 1940, 31(3), 195-203.

Wrightson, J. W., J. Justman, and I. Robbins, "*Evaluation in modern education.*" New York: American Book Co., 1956.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Illinois Teacher Evaluation Questionnaire (Adaptation for High School of the Illinois Course Evaluation Questionnaire) (#3)

AUTHOR: Lawrence M. Aleamone

AUTHOR/PUBLISHER ADDRESS: Measurement and Research Division, Office of Instructional Resources, University of Illinois, Urbana Illinois. (Also reported in Educational and Psychological Measurement, 1973, (33): 669-684).

CRITERIA EVALUATED: User must examine high school version

SUBJECT OF OBSERVATION

SETTINGS

☒ TEACHER AND PUPILS
☐ TEACHER ONLY (AND COURSES)
☐ PUPIL ONLY
☐ SMALL GROUPS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED

☒ 1 ONLY
☐ MORE THAN 2 PEOPLE IN CLASSROOM

CODING UNITS

☐ CATEGORY CHANGE
☐ TOPIC CHANGE

☐ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☒ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE (RETROSPECTIVE RATING)
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

☒ 1 PERSON (STUDENTS)
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

CATEGORY DIMENSIONS

☒ AFFECTIVE
☒ COGNITIVE
☒ PROCEDURE OR ROUTINE
☐ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☒ OTHER (STUDENT ATTITUDES)

USES REPORTED BY AUTHOR

☐ RESEARCH
☐ TRAINING
☒ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Pages 123-125.

Name: THE ILLINOIS COURSE EVALUATION QUESTIONNAIRE

Author: Lawrence M. Aleamoni

Type of Measure: Questionnaire

Availability: Aleamoni, L. M., *The Illinois course evaluation questionnaire*. Urbana, Illinois: Measurement and Research Division, Office of Instructional Resources, University of Illinois, 1972. A copy of Form 66 can also be found in: Aleamoni, L. M., and R. E. Spencer, "The Illinois Course Evaluation Questionnaire: A description of its development and a report of some of its results." *Educational and Psychological Measurement*, 1973, 33, 669-684.

Description: The Illinois Course Evaluation Questionnaire (CEQ) provides for student evaluation of courses and instructors. The original 1,000 items were based on criteria of effective instruction which were derived from an extensive review of the literature and suggestions from student and faculty committees at Pennsylvania State University. Following a trial administration of the instrument and factor analysis of the results obtained, 450 items were selected. Experimental forms of the test were readministered to 2 undergraduate samples at Pennsylvania State University. Results were analyzed, 28 items were retained, and 22 new items were added. This 50-item questionnaire (Form 66) was subjected to factor analysis, which produced 6 subscores.

A final revision of the CEQ, Form 73, was developed in 1973 to eliminate redundancy in the first form. It contains 23 items and yields 5 subscores: General Course Attitude, Course Content, Method of Instruction, Interest and Attention of the Students, and the Instructor. In addition, the teacher may include optional items which he has devised or selected from a catalogue of supplementary items.

The CEQ was designed for use with college-level students, although its content appears appropriate for high school seniors and juniors. A variation of the scale, the Illinois Teacher Evaluation Questionnaire (Mahan, 1970), has been constructed specifically for use in high school classrooms, but limited psychometric information is available on this form.

The CEQ can be used to provide information to both administrators and instructors in an effort to improve the quality of teaching.

Sample Items: The 23 items of Form 73 of the CEQ are followed by 4 response alternatives: Strongly Agree, Agree, Disagree, and Strongly Disagree. The instrument contains items of the following type:

1. I do not want to take another course from this instructor.
2. I would have preferred a different method of teaching in this course.
3. The instructor seemed to have an excellent knowledge of the subject matter.

Reliability: The reliability of the CEQ (Form 66) has been investigated in several different studies. Using split-half methods, 2 of these studies reported reliabilities of .92 and .93, corrected for length by the Spearman-Brown formula. The first study correlated negative and positive items, while the second correlated both halves of the negative items and both halves of positive items (reported in

Aleamoni, 1972). Reliabilities for each of the subscore areas were computed using the Kuder-Richardson formula 21 on the responses of students from 7 different courses. These ranged from .40 to .92, with Content being the least reliable subscale (Aleamoni and Spencer, 1973).

Gillmore (1972) also conducted several reliability studies. On a sample of 5,346 students, he obtained CEQ item reliabilities ranging from .73 to .94; subscale reliabilities ranged from .80 to .98. In a second study, using ratings of 103 instructors teaching 2 sections of the same course, he obtained item reliabilities ranging from .53 to .82. Dividing these sections into 2 groups and correlating odd and even items within each group, Gillmore found that coefficients ranged from .54 to .91 for Group I and from .67 to .91 for Group II.

Validity: Many different studies have investigated the validity of the CEQ (Form 66). Spencer and Dick (1965) related CEQ subscores to sex, term, curriculum, and final grade. Only final grade was significantly correlated with CEQ scores, a finding which is consistent with previous research.

Stallings and Spencer (1967) asked 10 measurement specialists and teaching assistants from the Speech Department of the University of Illinois to rate nine instructors. Their evaluations were correlated with student ratings, and a significant coefficient of .70 was obtained.

In a study by Swanson and Sisson (1971), a rank-order correlation of .70 was found between peer and student ratings of 12 instructors at Bowling Green State University. Aleamoni and Yimer (1972) found that colleague and student ratings on the CEQ were not significantly related to an instructor's research productivity. Yet, colleague ratings were significantly and positively related to an instructor's academic rank. This suggests that an instructor's reputation may also influence the ratings given him.

Finally, Aleamoni and Hexner (1973) found that students gave instructors higher ratings when they were told that their evaluations would be used in making salary and promotion decisions. These results suggest that information given preceding a course evaluation is an important variable to consider when administering the CEQ.

Norms: Normative data have been derived from the ratings of approximately 750 courses containing 2,784 sections and over 100,000 students at the University of Illinois. Additional normative information is provided on 5,346 course sections taught throughout the United States. These norms are continually updated.

Administration and Scoring: The CEQ is usually administered in the classroom over a 10-minute period. It is machine scored, and results are returned to the instructor. Average subscores and total scores with norm deciles are provided, along with specific item responses and their means and norm deciles. Pooled results for a number of sections of the same course may also be obtained.

Comments: The Illinois Course Evaluation Questionnaire is a well constructed instrument with adequate reliability, validity, and normative data provided for Form 66. The CEQ is an economical means of supplying feedback to individual instructors or evaluating the teaching process on a larger scale. The high school

version, The Illinois Teacher Evaluation Questionnaire, should become equally useful with the accumulation of relevant psychometric data.

References: Aleamoni, L. M., *A review of recent reliability and validity studies of the Illinois Course Evaluation Questionnaire (CEQ)*. Research Memorandum No. 127. Urbana, Illinois: Measurement and Research Division, Office of Instructional Resources, University of Illinois, 1972.

Aleamoni, L. M., *Evaluation by students to identify general instructional problems*. Urbana, Illinois: Measurement and Research Division, Office of Instructional Resources, University of Illinois, 1973.

Aleamoni, L. M., *The evaluation of instruction and the use of CEQ, Form 73*. Research Memorandum No. 152. Urbana, Illinois: Measurement and Research Division, Office of Instructional Resources, University of Illinois, 1974.

Aleamoni, L. M., and P. Z. Hexner, *The effect of different sets of instructions on student course and instructor evaluation*. Research Report 339. Urbana, Illinois: Measurement and Research Division, Office of Instructional Resources, University of Illinois, 1973.

Aleamoni, L. M., and R. E. Spencer, "The Illinois Course Evaluation Questionnaire: A description of its development and a report of some of its results." *Educational and Psychological Measurement*, 1973, 33, 669-684.

Aleamoni, L. M., and M. Yimer, "An investigation of the relationship between colleague rating, student rating, research productivity, and academic rank in rating instructional effectiveness." *Journal of Educational Psychology*, 1973, 64(3), 274-277.

Gillmore, G. M., *Estimates of reliability coefficients for items and subscales of the Illinois Course Evaluation Questionnaire*. Report No. 341. Urbana, Illinois: Measurement and Research Division, Office of Instructional Resources, University of Illinois, 1972.

Mahan, J. M., *Manual of interpretation for the Illinois Teacher Evaluation Questionnaire*. Research Report No. 316. Urbana, Illinois: Measurement and Research Division, Office of Instructional Resources, University of Illinois, 1970.

Spencer, R. E., and W. Dick, *Course evaluation questionnaire: Manual of interpretation*. Research Report No. 200. Urbana, Illinois: Measurement and Research Division, Office of Instructional Resources, University of Illinois, 1965.

Stallings, W. M., and R. E. Spencer, *Ratings of instructors in Accountancy 101 from video-tape clips*. Research Report No. 265. Urbana, Illinois: Measurement and Research Division, Office of Instructional Resources, University of Illinois, 1967.

Swanson, R. A., and D. J. Sisson, "The development, evaluation, and utilization of a departmental faculty appraisal system." *Journal of Industrial Teacher Education*, 1971, 1, 64-79.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Learning Environment Inventory (LEI) (LEI #4)

AUTHOR: Gary J. Anderson

AUTHOR/PUBLISHER ADDRESS: Atlantic Institute of Education, Halifax, NS

CRITERIA EVALUATED: 6, 11, 12, 14, 15 (Indirect, based on retrospective ratings by students)

SUBJECT OF OBSERVATION

SETTINGS

<u> </u>	TEACHER AND PUPILS	<u> x </u>	CLASSROOM, ANY SUBJECT (GR 7-12)
<u> </u>	TEACHER ONLY	<u> </u>	CLASSROOM, SPECIFIC SUBJECT
<u> </u>	PUPIL ONLY	<u> </u>	
<u> x </u>	SMALL GROUPS (CLASSROOM CLIMATE)		

CODING UNITS

NUMBER OF SUBJECTS OBSERVED

<u> </u>	1 ONLY
<u> x </u>	MORE THAN 2 PEOPLE IN CLASSROOM (ENTIRE CLASS)

<u> </u>	CATEGORY CHANGE
<u> </u>	TOPIC CHANGE

<u> </u>	SPEAKER CHANGE
<u> </u>	TIME UNIT
<u> </u>	TIME SAMPLE
<u> x </u>	RATING SCALE
<u> </u>	OTHER

COLLECTION METHODS

<u> x </u>	LIVE (RETROSPECTIVE RATING)
<u> </u>	LIVE WITH CODING EQUIPMENT
<u> </u>	VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

CATEGORY DIMENSIONS

<u> x </u>	AFFECTIVE
<u> </u>	COGNITIVE
<u> </u>	PROCEDURE OR ROUTINE
<u> </u>	ACTIVITY
<u> x </u>	SOCIOLOGICAL STRUCTURE
<u> </u>	OTHER

<u> x </u>	1 PERSON (STUDENTS)
<u> </u>	TEAM OF 2 PERSONS
<u> </u>	2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

<u> </u>	RESEARCH
<u> </u>	TRAINING
<u> x </u>	EVALUATION

REFERENCE:

Evaluating Classroom Instructions: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Pages 412-143.

Name: LEARNING ENVIRONMENT INVENTORY

Author: Gary J. Anderson

Type of Measure: Rating scale

Availability: Anderson, G. J., *The assessment of learning environments: A manual for the Learning Environment Inventory and the My Class Inventory*. Halifax, Nova Scotia, Canada: Atlantic Institute of Education, 1973.

Description: The Learning Environment Inventory (LEI) measures classroom climate as perceived by secondary school pupils along 15 dimensions, reflecting both interpersonal relationships among students and organizational characteristics of the classroom.

The LEI was developed in an attempt to expand and improve Walberg's (1968) Classroom Climate Questionnaire. Seven items were included on each LEI scale to obtain internally consistent dimensions. Items were assigned to scales by 4 independent judges. Those which were misclassified by one or more of the judges were modified or replaced. After empirical testing, 6 items with poor scale correlations were revised. The final version of the LEI contains 105 statements describing typical school classes on the following scales: Cohesiveness, Diversity, Formality, Speed, Environment, Friction, Goal Direction, Favoritism, Cliqueness, Satisfaction, Disorganization, Difficulty, Apathy, Democratic, and Competitiveness.

This instrument can be used to assess an individual student's perception of his class or to measure the learning environment of the class as a whole. Anderson (1973) maintains that class means provide the best estimate of collective student perceptions and suggests their use when different treatments are being studied across classes.

Sample Items: The LEI contains items of the following type with which the respondent expresses his agreement or disagreement on a 4-point scale.

Scale	Item
Cohesiveness	1. Students in this class don't know each other well enough to like or dislike one another.
Formality	2. There are well established rules of behavior in this classroom.
Friction	3. There is an atmosphere of tension among groups of students in this class.
Satisfaction	4. Most students enjoy coming to class.

Reliability: Alpha coefficients, intraclass correlations, and test/retest reliabilities are reported in the LEI manual (Anderson, 1973). Alpha coefficients, based on the responses of 1,048 high school students range from .54 (Diversity) to .85 (Goal Direction), while intraclass correlations for the same sample fall between .31 (Diversity) and .92 (Formality and Disorganization). Test/retest estimates, computed on a sample of 139 11th- and 12th-graders, over a 4-week interval, range from .43 (Diversity) to .73 (Friction). Anderson, notes, however, that

these results may be unrepresentative since unusual national political events, believed to have had a strong effect on high school students, occurred between test administrations.

Validity: The LEI manual summarizes validity studies on a scale-by-scale basis. Major relationships between each scale and selected other variables are reported. For example, the Cohesiveness scale has been related to class size, with smaller groups indicating greater cohesiveness. Large classes, on the other hand, were rated as more formal than small classes.

Science classes using the Harvard Project Physics Course, which promotes a variety of interests and activities and attempts to simplify physics, received higher scores on the Diversity scale and lower scores on the Difficulty scale than more traditional physics classes.

Other relationships, too numerous to mention here, were also in the expected directions.

Norms: Scale means and standard deviations are provided for 1,048 high school students in a variety of subject areas. Class means are also presented for 2 samples: (1) 47 Harvard Project Physics classes and 37 traditional physics classes, whose students were given an early (1967) version of the LEI; and (2) 62 diverse classes from 8 high schools in Montreal, where the 1969 version was administered.

Administration and Scoring: The test can be easily administered in 30 to 40 minutes. Students can respond on an optical scanning answer sheet, and their responses can then be punched onto regular IBM computer cards. Machine scoring is recommended due to the large number of subscales. Response alternatives are assigned values from 1 to 4. Scale scores are computed by totaling the item scores for each scale. Since all scales contain 7 items, scale scores range from 7 to 28.

Comments: The LEI is short, easy to administer, and supported by a wide variety of research. In general, its psychometric characteristics are satisfactory. The moderate internal consistency reliabilities are acceptable since the LEI attempts to measure many dimensions validly, rather than to measure a few dimensions very reliably.

References: Anderson, G. J., *The assessment of learning environments: A manual for the Learning Environment Inventory and the My Class Inventory*. Halifax, Nova Scotia, Canada: Atlantic Institute of Education, 1973.

Edwards, K. J., D. L. DeVries, and S. A. Livingston, *Changing the focus of response in assessing classroom learning environments*. Baltimore: Center for Social Organization of Schools, 1973.

Walberg, H. J., "Social environment as a mediator of classroom learning." *Journal of Educational Psychology*, 1969, 60, 443-448.

Walberg, H. J., and G. J. Anderson, "Properties of the achieving urban classes." *Journal of Educational Psychology*, 1972, 63, 381-385.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Pupil Observation Survey Report (#5)

AUTHOR: Donald J. Veldman and Robert F. Peck

AUTHOR/PUBLISHER ADDRESS: Research and Development Center for Teacher Education, The University of Texas, Austin, Texas, 78712. (Copy in Journal of Educational Psychology, 1963 (54): 346-355).

CRITERIA EVALUATED: 4, 7, 10

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☒ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

CODING UNITS

NUMBER OF SUBJECTS OBSERVED

☒ 1 ONLY
☐ MORE THAN 2 PEOPLE IN CLASSROOM

☐ CATEGORY CHANGE
☐ TOPIC CHANGE

☐ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☒ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

CATEGORY DIMENSIONS

☒ AFFECTIVE
☒ COGNITIVE
☒ PROCEDURE OR ROUTINE
☒ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☒ OTHER

☒ 1 PERSON
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☒ RESEARCH
☒ TRAINING
☐ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Pages 128-130.

Name: PUPIL OBSERVATION SURVEY REPORT

Authors: Donald J. Veldman and Robert F. Peck

Type of Measure: Rating scale

Availability: The Pupil Observation Survey Report can be obtained from the Research and Development Center for Teacher Education, The University of Texas, Austin, Texas 78712. A copy of this instrument also appears in: Veldman, D. J., and R. F. Peck, "Student teacher characteristics from the pupils' viewpoint." *Journal of Educational Psychology*, 1963, 54, 346-355; and in White, W. F., and O. T. Dekle, "Effect of teacher's motivational cues on achievement level in elementary grades." *Psychological Reports*, 1966, 18, 351-356.

Description: The Pupil Observation Survey Report (POSR) is a 38-item rating scale used to measure pupils' perceptions of their student teacher. Though originally designed for use in grades 7 through 12, the POSR has been successfully employed by White and Dekle (1966) in grades 5 and 6 as well.

Items on the POSR represent 5 factors: (1) Friendly, Cheerful, Admired; (2) Knowledgeable, Poised; (3) Interesting, Preferred; (4) Strict Control; and (5) Democratic Procedure. Factor 1 has been shown to differentiate ($p < .01$) over-achievers, underachievers, and average achievers (White and Dekle, 1966). On Factors, 2, 4, and 5, cooperating teachers received higher ratings than student teachers, while the reverse was true on Factors 1 and 3 (Veldman, 1970).

Sample Items: All of the items on the POSR are positively phrased statements describing the student teacher. The pupils respond to these statements in 1 of 4 ways: "T" = completely true; "t" = more true than false; "f" = more false than true; and "F" = totally false. Items of the following type appear on the scale:

Factor	Item
1. Friendly, Cheerful, Admired	She is very easy to get along with.
2. Knowledgeable, Poised	She knows a lot about the subject she teaches.
3. Interesting, Preferred	With her, learning is more fun than it is work.
4. Strict Control	Her students can't get away with anything.
5. Democratic Procedure	She often asks the students how they feel about proposed projects before assigning them.

Reliability: Veldman and Peck (1963) report factor score reliabilities for the POSR. These were computed on 50 student teachers (selected from a sample of 554) whose classes were the largest. Each class was randomly divided in half, and each of these halves completed the POSR. Factor scores were obtained for each half-class. The two comparable factor scores for each teacher were then

correlated to yield "split-class" reliabilities of: .92 for Factor 1; .72 for Factor 2; .91 for Factor 3; .81 for Factor 4; and .89 for Factor 5. These estimates were not corrected for size since they were computed on the largest classes in the sample.

Validity: Veldman and Peck (1963) approached construct validity by checking the stability of POSR factors across different samples. They compared factor structures based on the scores of three separate groups of student teachers and obtained coefficients ranging from .89 to .99 (median = .98).

In an attempt to establish criterion-related validity, POSR factor scores were correlated with scale scores on the California Personality Inventory (CPI) and the Self-Report Inventory (SRI). Correlations between POSR and CPI scores never exceeded .30, although 34 out of 180 were statistically significant. Those between the POSR and the SRI did not exceed .24. These correlations indicated minor, but indistinct, relationships between the measures. Correlations between the POSR scores and supervisor ratings of student teachers yielded more interpretable results. Factors 1, 2, and 4 (Friendliness, Knowledge, and Control) were all significantly related to the supervisory ratings of teaching effectiveness (Veldman and Peck, 1963).

In a later study, Veldman and Peck (1969) investigated the effect of content and other variables on POSR scores. Their data clearly indicated that the subject matter being taught strongly affected POSR scores, while grade level and socioeconomic status of the respondents exerted only minor influence on ratings given to teachers.

Norms: Veldman and Peck (1963) present no normative data for the POSR. However, use of local norms is recommended for this instrument.

Administration and Scoring: Administering the POSR is fairly easy. Pupils are given a set of instructions and an explanation of the test, assuring them that their responses will not be used to give the student teacher a grade. It is preferable that the POSR be answered anonymously and administered by someone other than the student teacher.

Scores on the POSR are determined by assigning numerical values (1 through 4) to the various response categories. Since all items are positively stated, scoring is never reversed. Factor scores are computed by summing the scores of items representing each factor.

Comments: As a research instrument, the Pupil Observation Survey Report has considerable utility. It can also be used in teacher training to help student teachers assess their performances and identify problems in pupil/teacher relationships. Users of the POSR, however, must recall that subject matter being taught may affect POSR scores, causing certain groups of student teachers to obtain consistently lower ratings.

References: Veldman, D. J., "Pupil evaluation of student teachers and their supervisors." *Journal of Teacher Education*, 1970, 21, 165-167.

Veldman, D. J., and R. F. Peck, "Student teacher characteristics from the pupils' viewpoint." *Journal of Educational Psychology*, 1963, 54, 346-355.

Veldman, D. J., and R. F. Peck, "Influences on pupil evaluations of student teachers." *Journal of Educational Psychology*, 1969, 60, 103-108.

White, W. F., and O. T. Dekle, "Effects of teacher motivational cues on achievement level in elementary grades." *Psychological Reports*, 1966, 18, 351-356.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: The Purdue Teacher Evaluation Scale (#6)

AUTHOR: Ralph R. Bentley and Allan R. Starry

AUTHOR/PUBLISHER ADDRESS: Purdue Research Foundation, Purdue University,
Lafayette, Indiana.

CRITERIA EVALUATED: 7, 12, 17

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED

☒ 1 ONLY
☐ MORE THAN 2 PEOPLE IN
CLASSROOM

CODING UNITS

☐ CATEGORY CHANGE
☐ TOPIC CHANGE

☐ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☒ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE (RETROSPECTIVE RATING)
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

CATEGORY DIMENSIONS

☒ AFFECTIVE
☐ COGNITIVE
☒ PROCEDURE OR ROUTINE
ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

☒ 1 PERSON (STUDENTS)
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☐ RESEARCH
☐ TRAINING
☒ EVALUATION*

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Pages 134-135.

* INDIVIDUAL ITEM INFORMATION MORE USEFUL THAN SCALE SCORES

Name: THE PURDUE TEACHER EVALUATION SCALE

Authors: Ralph R. Bentley and Allan R. Starry

Type of Measure: Rating scale

Availability: Bentley, R. R., and A. R. Starry, *The Purdue teacher evaluation scale, form A*. Lafayette, Indiana: Purdue Research Foundation, Purdue University, 1970. *The Purdue Teacher Evaluation Scale* and the *Manual for the Purdue Teacher Evaluation Scale* may be obtained from the University Book Store, 360 State Street, West Lafayette, Indiana 47906.

Description: The Purdue Teacher Evaluation Scale (PTES) was designed to provide the junior or senior high school teacher with an evaluation of his performance as seen through the eyes of his students. The PTES contains 60 questions which are grouped into 6 scales identified by a composite principal components analysis. These scales are: (1) Ability to Motivate Students; (2) Ability to Control Students; (3) Subject Matter Orientation of Teacher; (4) Student-Teacher Communication; (5) Teaching Methods and Procedures; and (6) Teacher Fairness.

The PTES was developed to aid teachers in their efforts at self-improvement. Accordingly, students are asked to assess specific, rather than general, behavioral characteristics. Scale items were originally drawn from a collection of short statements about teacher behaviors, written by educators and researchers. These statements were administered to approximately 60 classes of students, and were then analyzed and revised to make up the present form of the PTES.

Sample Items: Students respond to PTES items by selecting and checking 1 of 4 alternatives, ranging from "very much like my teacher" to "very much unlike my teacher." Items of the following type are included on the scale.

My teacher . . .

1. speaks clearly.
2. knows when we do not understand.
3. has pet students.
4. gives homework which helps in understanding the lessons.

Reliability: Bentley and Starry (1970) maintain that test/retest reliabilities are most meaningful for a rating scale of this type. However, since test/retest data are not available, they report an estimate of stability obtained using a modified split-half technique. Twenty evaluations for each of 128 teachers were selected and divided into random halves. For each random half, a median score for each scale was computed. These 128 median scores were then correlated, producing reliability coefficients ranging from .83 for Teacher Fairness to .91 for Ability to Motivate Students.

Validity: Bentley and Starry (1970) report that there are no relevant criteria by

which to judge the validity of the PTES. They do note, however, that students tend to agree with one another in rating a particular teacher.

Correlations among the six PTES scales, computed on a sample of 198 teachers, range from .47 to .89.

Norms: Norms are based on a sample of 198 teachers, evaluated on the PTES by approximately 5,000 students. These teachers were from middle- and upper-class junior and senior high schools located in the midwestern United States.

Administration and Scoring: The PTES is self-administering, though the instructions, printed on a separate sheet, must be read to the students, preferably by someone other than the teacher being evaluated. Approximately 20 minutes are required to complete the PTES.

Scoring may be done either by hand or by computer. Sixty median item scores and 6 scale scores are produced for each class. For positive statements the response "Very much like my teacher" is weighted 4 and the response "Very much unlike my teacher" is weighted 1. For negatively worded items the weights are reversed. While a scoring key is provided, a more comprehensive scoring and reporting service is offered by Purdue University's Measurement and Research Center. If the teacher desires, PTES results are treated confidentially.

Comments: The Purdue Teacher Evaluation Scale is an excellent aid for the teacher interested in improving his performance. Though the value of scale scores is questionable (due to high scale intercorrelations), the PTES does provide valuable information via 60 item scores. It also offers adequate normative data (a rarity among teacher evaluation questionnaires) and a confidential scoring service.

References: Bentley, R. R., and A. R. Starry, *Manual for the Purdue Teacher Evaluation Scale*. Lafayette, Indiana: Purdue Research Foundation, Purdue University, 1970.

Purdue measurement and evaluation instruments. Lafayette, Indiana: Purdue Research Foundation, Purdue University, undated.

Woolfold, T. V., *Teacher perception of organizational inducement and student assessment of teacher performance*. Unpublished doctoral dissertation, Purdue University, 1970.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Students' Evaluations of Instructional Effectiveness: Research and Survey Instrument (#7).

AUTHOR:

AUTHOR/PUBLISHER ADDRESS: Beatty, Brandon; Marsh, Herbert W. (ERIC Microfiche, ED 141 413)

CRITERIA EVALUATED: 1, 6, 10, 11, 12, 15

SUBJECT OF OBSERVATION

SETTINGS

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

CODING UNITS

NUMBER OF SUBJECTS OBSERVED
☐ 1 ONLY
☒ MORE THAN 2 PEOPLE IN CLASSROOM

☐ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☒ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE (RETROSPECTIVE RATING)
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

CATEGORY DIMENSIONS

☒ AFFECTIVE
☒ COGNITIVE
☒ PROCEDURE OR ROUTINE
☒ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

☒ 1 PERSON (SENIOR STUDENTS)
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☐ RESEARCH
☐ TRAINING
☒ EVALUATION

REFERENCE:

ERIC ED 141 413

TABLE I
DIMENSIONS OF EFFECTIVE TEACHING
AND THEIR DEFINING ITEMS

BREADTH

- 30 -- The instructor discussed points of view other than his own
- 47 -- The instructor contrasts the implications of various theories
- 48 -- The instructor adequately discusses recent developments in the field
- 49 -- The instructor adequately presents the origin of ideas and concepts
- 56 -- Does the instructor invite criticism of his own ideas

ORGANIZATION/CLARITY

- 51 -- Relative to other courses, the instructor's lectures are easy to outline
- 2 -- The course objectives were adequately outlined so that you knew where the course was going
- 35 -- Adequate time was distributed over course topics
- 1 -- The purpose of class assignments was made clear and was integrated into the overall course structure
- 28 -- The instructor was helpful in emphasis and summarization of main points during presentations
- 50 -- The instructor's explanations are clear
- 24 -- The course successfully integrated lecture materials and outside assignments
- 35 -- To what extent was the workload evenly distributed over the quarter
- 23 -- Agreement between proposed course objectives and those actually taught

INTEREST/DYNAMIC

- 61 -- The instructor is dynamic and energetic
- 62 -- The instructor has an interesting style of presentation
- 63 -- The instructor enjoys teaching
- 5 -- The instructor was enthusiastic about teaching the course
- 18 -- What is your overall rating of the instructor
- 64 -- The instructor has a sense of humor
- 32 -- The instructor held your interest

DIFFICULTY

- 38 -- Did the instructor pace his presentations to the understanding of the class
- 17 -- Relative to other courses, how difficult was it to master the contents of the course
- 34 -- The instructor accurately gauged student background and knowledge in the subject

LEARNING/VALUE

- 15 -- You learned something of value from the course
- 46 -- You have developed an increased appreciation for the subject
- 16 -- How adequately do you feel that you have mastered the contents of the course
- 40 -- The examinations were of instructional value
- 41 -- The assignments were interesting and stimulating
- 20 -- To what extent did the course meet your objectives for taking the course
- 13 -- The instructor stimulated your intellectual curiosity in the subject

INTERACTION/DISCUSSION

- 53 -- Does the instructor encourage class discussion
- 8 -- Given the constraints of the course, does the instructor involve students in class discussion
- 54 -- Does the instructor adequately invite students to share their knowledge and experiences
- 26 -- Does the instructor allow a few students to monopolize class discussion
- 59 -- The instructor relates to students as individuals

INDIVIDUAL CONTACT

- 9 -- The instructor had adequate office hours during which he/she was available
- 60 -- The instructor recognizes and greets students out of class
- 58 -- The instructor is friendly toward students
- 10 -- The instructor was easy to approach and made you feel welcome in seeking help
- 57 -- The instructor has a genuine interest in the students
- 59 -- The instructor relates to students as individuals

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Student Evaluation of Teaching I (#8)

AUTHOR: Donald J. Velma and Robert F. Peck

AUTHOR/PUBLISHER ADDRESS: Dissemination Dept., R and D Center for Teacher Education, The University of Texas, Austin, Texas 78712

CRITERIA EVALUATED: 7, 17

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

CODING UNITS

NUMBER OF SUBJECTS OBSERVED
☒ 1 ONLY
☐ MORE THAN 2 PEOPLE IN CLASSROOM

☐ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☒ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE (RETROSPECTIVE RATING)
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

CATEGORY DIMENSIONS

☒ AFFECTIVE
☐ COGNITIVE
☒ PROCEDURE OR ROUTINE
☐ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

☒ 1 PERSON (STUDENTS)
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☐ RESEARCH
☐ TRAINING
☒ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Pages 138-139.

Name: STUDENT EVALUATION OF TEACHING I

Authors: Donald J. Veldman and Robert F. Peck

Type of Measure: Rating scale

Availability: Requests should be sent to SET I Order, Dissemination Department, Research and Development Center for Teacher Education, The University of Texas, Austin, Texas 78712.

Description: The Student Evaluation of Teaching (SET) I is a 10-item scale designed to measure the way in which students in fifth grade or above perceive their teachers. The SET I was derived from a factor analysis of the Pupil Observation Survey Report (POSR) (Veldman and Peck, 1967), which yielded 5 major dimensions describing student perceptions of teacher style. These were: Friendly and Cheerful; Knowledgeable and Poised; Lively and Interesting; Firm Control (Discipline); and Nondirective (Democratic). The two items loading highest on each factor were selected for inclusion on the SET I. Data used in developing the SET I were collected only on the POSR and then applied to SET I items.

The authors suggest that this instrument be used in evaluating student teachers, as a source of information concerning pupil/teacher interaction. A companion instrument, the SET II (included in this volume), may be used to evaluate kindergarten through third-grade teachers.

Sample Items: The 10 items on the SET I are divided into 5 scales, each containing 2 items. The student responds to each item by marking F for "always false," f for "often false," t for "often true," and T for "always true," depending on the degree to which the statement applies to the teacher in question.

The following items are similar to those on the SET I:

This teacher:

1. F f t T is always kind to students.
2. F f t T is very interesting.
3. F f t T does not let students misbehave.

Reliability: Since the research report describing the SET I presents no data collected specifically on the SET I, no reliability figures are available. Veldman (1970) does report intercorrelations between the 2 items on each scale, ranging from .56 to .86. These data were obtained by deriving SET scores from POSR data.

Validity: Validity studies on the SET I are also scarce. However, the items clearly relate to the student's perception of the teacher. Therefore, the instrument seems to have face validity.

A factor analytic study reported by Veldman (1970) attempted to confirm that the SET I factor structure corresponded to that of the POSR. Each item

loaded highest on the expected factor. Unfortunately, the SET I data used in this study were simulated from the POSR data to which they were compared.

Norms: No norms are provided for the SET I. The nature and purposes of this instrument preclude normative expectations. Veldman and Peck (1970) report several tendencies in the way in which particular kinds of teachers are perceived. These should be considered when one is interpreting SET I results. Variables that are apparently related to SET I scores are teacher and pupil sex, subject matter area, grade, and socioeconomic level.

Administration and Scoring: Administration of the SET I is not explicitly discussed in the research report describing the instrument. However, it appears that administration is quite easy. Instructions are printed on the test sheets, which may be given to an entire class of pupils at once.

Scoring the SET I is also fairly easy. All items are stated in a positive direction: F = 1; f = 2; t = 3; and T = 4. A computer is useful in processing group data. Student responses can be punched onto computer cards according to a program recommended by Veldman (1970), which produces item means and scale scores, giving a verbal interpretation of both. Finally, the average of all item means is computed as an index of overall evaluation. All of this can be done by hand, but it would be a laborious procedure.

Veldman (1970) emphasizes the importance of interpreting scale scores as complete profiles. For example, a high score on Firm Control¹ would mean different things depending on the level of other scale scores.

Comments: Though the SET I lacks adequate psychometric data, it is probably an appropriate instrument for the purposes suggested by its authors. It does yield a summary measure of students' perceptions of a teacher. Such an assessment can provide useful information to the teacher concerning his or her impact on students. Users of the SET I, however, should be careful not to over-interpret the results, since so few psychometric data are available.

References: Veldman, D. J., *Student evaluation of teaching*. Research Methodology Monograph No. 10. Austin, Texas: Research and Development Center for Teacher Education, University of Texas, 1970.

Veldman, D. J., and R. F. Peck, *Information about Student Evaluation of Teaching*. Austin, Texas: Research and Development Center for Teacher Education, University of Texas, undated.

Veldman, D. J., and R. F. Peck, *The Pupil Observation Survey: Teacher behavior from the pupils' viewpoint*. Austin, Texas: Research and Development Center for Teacher Education, University of Texas, 1967.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Student Evaluation of Teacher Instrument II (#9)

AUTHOR: Ruth Adolph Haak, Douglas A. Kleiber, and Robert F. Peck

AUTHOR/PUBLISHER ADDRESS: Dissemination Dept., R and D Center for Teacher Education, University of Texas, Austin, Texas, 78712

CRITERIA EVALUATED: 10, 17

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

CODING UNITS

NUMBER OF SUBJECTS OBSERVED
☒ 1 ONLY
☐ MORE THAN 2 PEOPLE IN CLASSROOM

☐ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☒ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE (RETROSPECTIVE RATINGS)
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

CATEGORY DIMENSIONS

☒ AFFECTIVE
☐ COGNITIVE
☒ PROCEDURE OR ROUTINE
☐ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

☒ 1 PERSON (STUDENTS)
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☐ RESEARCH
☐ TRAINING
☒ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Pages 140-142.

Name: STUDENT EVALUATION OF TEACHER INSTRUMENT II

Authors: Ruth Adolf Haak, Douglas A. Kleiber, and Robert F. Peck

Type of Measure: Rating scale

Availability: Requests should be sent to: SET II Order, Dissemination Department, Research and Development Center for Teacher Education, University of Texas, Austin, Texas 78712.

Description: The Student Evaluation of Teacher Instrument II (SET II) contains 20 items, each of which is a simple statement about the teacher or the teacher's attitude toward the student. It incorporates 3 dimensions, derived through factor analysis of an early form of the instrument. These are: Unreasonable Negativity; Fostering of Self-Esteem; and Stimulating, Interactive Style, which has two subscales, Rapport and Interactional Competence.

The SET II was designed to assess the way in which children in kindergarten through third grade (or disadvantaged children through grade 6) view their teachers. Its predecessor, the SET I (included in this volume), is used with older children, in grades 5 and above. In developing the initial form of SET II, the authors attempted to construct items that would measure either students' perceptions of teacher competency or their feeling ("love") toward the teacher. Items were originally classified as either direct assessments of the teacher or estimates of the teacher's attitude toward students. Under each classification were the dimensions of "love," "competency," and "diagnostic information." Factor analysis of the pilot data failed to substantially support these classifications, and they were abandoned in favor of the factor structure mentioned above.

Sample Items: The SET II contains items of the following type:

<i>Factor</i>	<i>Item</i>
I. Stimulating, Interactive Style	
Subscale 1: Rapport (5 items)	1. My teacher makes school a lot of fun. 2. My teacher thinks kids are good.
Subscale 2: Interactional Competence (4 items)	1. My teacher listens to what we say.
II. Unreasonable Negativity (5 items)	1. My teacher thinks I am lazy. 2. My teacher is always "picking on" me.
III. Fostering of Self-Esteem (6 items)	1. My teacher thinks I can do a lot by myself. 2. My teacher thinks I have good ideas.

Each item is printed on a separate card and is read to the student who then places the card in either a "true" or "false" pile.

Reliability: Haak, Kleiber, and Peck (1972) report test/retest reliability data collected during the pilot study of the SET II. Since item format calls for a true-false answer, the authors chose a percentage of agreement (PA) statistic as a measure of reliability. The sample was taken from children in kindergarten through grade 6 in the Austin (Texas) Independent School District. An attempt was made to choose a stratified sample in terms of grade level and cultural background. Percentages of agreement among children in kindergarten ranged from 59.3 to 89.5, with 8 items achieving PAs greater than 75. PAs for first-grade children ranged from 69.7 to 92.2, with 15 being greater than 80. The range for second- and third-grade children was 68.3 to 89.4, with 16 PAs at 75 or above. An additional sample composed of fourth- through sixth-grade Mexican-American children yielded PAs ranging from 66.9 to 94, with 19 over 75. The authors also report percentage of agreement from first to second testing on a sample divided in terms of cultural group (black, Mexican-American, and white), ability level (low, medium, and high), and a combination of cultural group and ability level. Except at the kindergarten level, PAs for each item were generally between 70 and 90.

Validity: No validity data are reported in the SET II manual (Haak, Kleiber, and Peck, 1972). However, factor analytic data for grades 1 through 3 in the pilot study are presented. Factor loadings are fairly high: those on Factor 1 ranged from .60 to .94; those on Factor 2 from .61 to .81; and those on Factor 3 from .59 to .78. Most items did not load substantially in the same direction on more than 1 factor, the only exception being item 19 ("She likes for me to help her"), which loaded -.45 on Factor 2 and -.59 on Factor 3. A factor analysis of data collected from all elementary grades produced similar factor loadings. Items on Factor 1, however, split into 2 groups: Rapport and Interactional Competence. These 2 item groupings were incorporated as subscales of Factor 1.

Norms: The norms presented in the SET II manual are based on only 36 teachers in the public schools of Austin, Texas. The SET II authors do not recommend their use in other settings; instead they encourage local norming.

Administration and Scoring: The procedure for administering the SET II is uncomplicated and requires no special training. On each card an item is printed, along with a picture which is placed in the upper right-hand corner. The administrator identifies the card to the children by calling attention to the picture. He or she then reads the item to the children, who respond to it by placing the card in either a "true" envelope, identified by a picture of a post-office box, or a "false" envelope, identified by a picture of a trash can.

A tally sheet is used to score each student's responses. The scorer checks "true" or "false" beside each item listed. Responses are weighted as indicated on the scoring sheet, and then summed to obtain a scale score.

Teacher tally sheets and profile sheets may be used to record the entire class' perception of the teacher.

Comments: The SET II is a carefully constructed instrument with a great deal of face validity. However, there are as yet no real validity or reliability studies relating to scale or subscale scores. With more developmental research in these 2 areas, the SET II may become a useful instrument for helping teachers in grades 1 through 3 to develop interpersonal skills and more positive relationships with their pupils.

References: Haak, R., D. Kleiber, and R. Peck, *Manual: Student Evaluation of Teacher Instrument, II*. Austin, Texas: The Research and Development Center for Teacher Education, The University of Texas, 1972.

Borich, G. D., R. C. Godbout, R. F. Peck, M. M. Kash, and L. H. Poynor, *An evaluation of the personalized model of teacher training. Final report*. Austin, Texas: Research and Development Center for Teacher Education, The University of Texas, 1974.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Student Perception of Teacher Style (#10)

AUTHOR: Bruce W. Tuckman

AUTHOR/PUBLISHER ADDRESS:

Copy of the scale may be found in Journal of Educational Research, 1970, (63): 398-400.

CRITERIA EVALUATED:

16

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☐ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

NUMBER OF SUBJECTS OBSERVED

☒ 1 ONLY
☐ MORE THAN 2 PEOPLE IN CLASSROOM

CODING UNITS

☐ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☒ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE (RETROSPECTIVE RATINGS)
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

☒ 1 PERSON (STUDENTS)
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

CATEGORY DIMENSIONS

☐ AFFECTIVE
☐ COGNITIVE
☒ PROCEDURE OR ROUTINE
☐ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☐ OTHER

USES REPORTED BY AUTHOR

☒ RESEARCH
☐ TRAINING
☐ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Pages 143-144.

Name: STUDENT PERCEPTION OF TEACHER STYLE

Author: Bruce W. Tuckman

Type of Measure: Rating scale

Availability: A copy of the scale may be found in: Tuckman, B. W., "A technique for the assessment of teacher directiveness." *Journal of Educational Research*, 1970, 63, 398-400.

Description: The 17-item Student Perception of Teacher Style (SPOTS) rating scale was designed to measure student perception of teacher directiveness. The instrument is based on concepts of directive teaching which were determined by the author from a review of the literature and from classroom observation. These concepts emphasize the structure and quality of interpersonal relationships within junior high and secondary school classrooms. The original SPOTS consisted of 32 items. Two other instruments, the Observer Rating Scale (ORS) and the Teacher Style Checklist (TSC), were developed to refine and determine the construct validity of the SPOTS. Two trained observers rated 22 11th- and 12th-grade teachers on the ORS and the TSC. These teachers were concurrently rated by their students on the SPOTS. Based on intercorrelations between the 3 tests, item analysis, and factor analysis, the original 32 items were reduced to the present 17, yielding a more efficient instrument.

Sample Items: Each SPOTS item consists of a stem followed by a response scale. The student marks one of the 9 points on the scale which best describes his perception of the teacher or classroom. The instrument contains items of the following type:

1. Your instructor is mainly concerned with

1 2 3

The number of facts
you know.

4 5 6

Getting an idea
across to you.

7 8 9

Your ability to think
for yourself.

2. Students in our classroom

1 2 3

Only talk if the
instructor asks
them a question.

4 5 6

Sometimes volunteer
information.

7 8 9

Frequently initiate
discussion.

3. For group projects or class committees the teacher

1 2 3

Gives us exact
instructions on what
to do.

4 5 6

Makes suggestions
about the project

7 8 9

Allows the group
members to make
the decisions.

Reliability: Reliability of the SPOTS was investigated as the instrument was revised (Tuckman, 1970). The mean SPOTS score on each item of the 32-item scale was correlated with the total mean score for each of 22 teachers. Seventy-eight percent of the item scores correlated significantly with total scores, the coefficients ranging from .45 to .91. The 7 items demonstrating the lowest item-total correlations were omitted from the final scale.

Interrater reliability was determined by ranking each student according to the agreement between his SPOTS score and the mean SPOTS score for each of 22 teachers, and then correlating these agreement figures with each teacher's average SPOTS rating. The ratings of students ranking 1 through 4 correlated approximately .95 with the class average; those of students ranking 5 through 8 correlated approximately .84 with the class average; and those of students ranking 9 and 10 correlated .77 and .69, respectively. The ratings of students ranked below 10 did not show high agreement with the class average.

Validity: A significant ($p < .01$) correlation (.53) was obtained between the mean SPOTS rating for each teacher and his corresponding ORS rating. Similarly, a correlation of .31 ($p < .01$) was obtained between the SPOTS mean for each teacher and his mean TSC score. The TSC and ORS correlated .75 ($p < .01$), indicating that they are comparable measures.

Administration and Scoring: The SPOTS is easy to administer. The average high school student should be able to complete the instrument in a short time with minimal instruction. The teacher's rating is obtained by computing the mean score for each item as well as a mean for all of the items combined.

Norms: Item and total means are available on ratings given by 363 male students at 2 vocational/technical high schools to 22 11th- and 12th-grade male teachers, each of whom had at least 5 years of teaching experience.

Comments: Remmers (1963) suggested 5 criteria for evaluating student rating scales, and the Student Perception of Teacher Style appears to meet all 5. The instrument demonstrates sufficient (1) objectivity, (2) reliability, (3) sensitivity in discriminating between instructors, (4) utility and (5) relevance, in this case to the construct of directiveness.

Because the instrument is fairly new, and psychometric data still somewhat limited, its use should be restricted to research at present.

References: Remmers, H. H., "Rating methods in research on teaching." In N. L. Gage (ed.), *Handbook of research on teaching*. Chicago: Rand McNally, 1963.
Tuckman, B. W., "A technique for the assessment of teacher directiveness." *Journal of Educational Research*, 1970, 63, 395-400.

OBSERVATION INSTRUMENT DESCRIPTION

INSTRUMENT: Teacher Image Questionnaire (#11)

AUTHOR: Roy C. Bryan

AUTHOR/PUBLISHER ADDRESS: Education Feedback Center, Western Michigan University, Kalamson, Michigan, 49001

CRITERIA EVALUATED: One factor analytic study suggests that it is mainly teacher's popularity and charisma which is being rated.

SUBJECT OF OBSERVATION

☒ TEACHER AND PUPILS
☒ TEACHER ONLY
☐ PUPIL ONLY
☐ SMALL GROUPS

SETTINGS

☒ CLASSROOM, ANY SUBJECT
☐ CLASSROOM, SPECIFIC SUBJECT

CODING UNITS

NUMBER OF SUBJECTS OBSERVED
☒ 1 ONLY
☐ MORE THAN 2 PEOPLE IN CLASSROOM

☐ CATEGORY CHANGE
☐ TOPIC CHANGE
☐ SPEAKER CHANGE
☐ TIME UNIT
☐ TIME SAMPLE
☒ RATING SCALE
☐ OTHER

COLLECTION METHODS

☒ LIVE (RETROSPECTIVE RATINGS)
☐ LIVE WITH CODING EQUIPMENT
☐ VIDEO AND/OR AUDIO TAPE

OBSERVER(S) REQUIRED

CATEGORY DIMENSIONS

☒ AFFECTIVE
☒ COGNITIVE
☒ PROCEDURE OR ROUTINE
☐ ACTIVITY
☐ SOCIOLOGICAL STRUCTURE
☒ OTHER (TEACHER'S CHARISMA)

☒ 1 PERSON (STUDENTS)
☐ TEAM OF 2 PERSONS
☐ 2 TEAMS OF 2 PERSONS

USES REPORTED BY AUTHOR

☐ RESEARCH
☐ TRAINING
☒ EVALUATION

REFERENCE:

Evaluating Classroom Instruction: A Sourcebook of Instruments, Gary D. Borich and Susan K. Madden, Addison-Wesley Publishing Company Inc., Don Mills, Ontario, 1977, Pages 145-146.

Name: TEACHER IMAGE QUESTIONNAIRE

Author: Roy C. Bryan

Type of Measure: Rating scale

Availability: Bryan, R. C., *Some observations concerning written student reactions to high school teachers*. Kalamazoo, Michigan: Student Reaction Center, Western Michigan University, 1968. A copy of the instrument may also be obtained from the Education Feedback Center, Western Michigan University, Kalamazoo, Michigan 49001.

Description: The Teacher Image Questionnaire (TIQ) contains 16 questions designed to obtain the opinions of students in grades 7 through 12 about their teachers, as well as 2 optional items which allow students to comment upon the teacher's strengths and weaknesses. Although the TIQ was initially designed to provide feedback for improving teacher effectiveness, it has also been used in studies of teacher image.

This instrument was developed on the theory that there are 3 kinds of criteria for judging teacher effectiveness: product criteria, presage criteria, and process criteria. Since product criteria (long-term outcomes) are difficult to measure, and presage criteria (teacher experience variables) do not provide feedback which can help the teacher improve his or her effectiveness, process criteria were chosen as the basis of the TIQ. Process criteria include variables such as teacher attitude, teacher behavior, and student perceptions of teacher performance. Student perceptions were considered the most important factor in determining teacher effectiveness since they reflect the other 2 process variables, and therefore were selected as the assessment technique for the TIQ.

Sample Item: The TIQ measures the student's reaction to questions about his or her teacher. Responses vary from "poor" to "excellent" on a 5-point scale. Items of the following type are included on the questionnaire:

1. *Knowledge of Subject Matter:* (Does your teacher seem to have a good grasp of the subject matter?)

poor fair average good excellent

2. *Homework:* (Does your teacher give homework assignments which are interesting and appropriate?)

poor fair average good excellent

3. *Openness:* (Can your teacher see things from a variety of perspectives?)

poor fair average good excellent

Reliability: Bryan (1968) reports reliability data collected in 50 randomly selected secondary school classes, each composed of 24 to 32 students. Classes were split

into chance halves, and estimates of internal consistency were computed for the first 12 TIQ items and corrected with the Spearman-Brown formula. These estimates ranged from .82 to .95.

Validity: Bryan (1968b) correlated TIQ ratings completed by students with those completed by administrators on a group of 114 teachers and obtained a coefficient of .61. In a similar study, involving 38 teachers, student and administrator ratings correlated .68.

Bryan (1966) also reported that teacher image, which is normally resistant to change, can be modified with the help of TIQ profiles. In periods up to 2 years, 57% of a group of teachers who had access to their TIQ ratings were able to produce significant gains on 1 or more of the TIQ variables.

A factor analysis of the TIQ (Coats, 1970) produced no meaningful or clearcut item clusters. While student-centered items tended to cluster together, as did structure-related items, one single factor, labeled teacher charisma, accounted for 61.5% of the variance. Coats also found that correlations among items ranged from .32 to .85.

Norms: The TIQ has been administered to students in the 7th through 12th grades. Means and standard deviations computed on the responses of these students are available for 1,630 teachers who were rated on the TIQ from 1970 to 1973.

Administration and Scoring: The TIQ can be administered to an entire class in about 15 minutes. After the instrument has been administered, completed questionnaires are placed in an envelope (along with class and teacher ID forms) and mailed to the Student Reaction Center (Western Michigan University), where answers are analyzed and a report is prepared and sent to the teacher. Confidentiality is assured, and the teacher may request letters of recommendation based on his TIQ profile.

Comments: The TIQ is an inexpensive and useful tool for determining student attitudes toward the teacher. For a nominal fee, the teacher receives a report and profile of his students' reactions. There is some danger, however, that this instrument may measure teacher charisma or popularity rather than actual teaching effectiveness.

References: Bryan, R. C., "The teacher's image is stubbornly stable." *Clearing House*, 1966, 40, 459-460.

Bryan, R. C., "High school students view classroom control." *Clearing House*, 1968, 42, 345-346. (a)

Bryan, R. C., *Some observations concerning written student reactions to high school teachers*. Kalamazoo, Michigan: Student Reaction Center, Western Michigan University, 1968. (b)

Coats, W. D., *Students' perceptions of teachers: A factor analytic study*. Paper presented at annual meeting of the American Educational Research Association, Minneapolis, Minnesota, March, 1970.